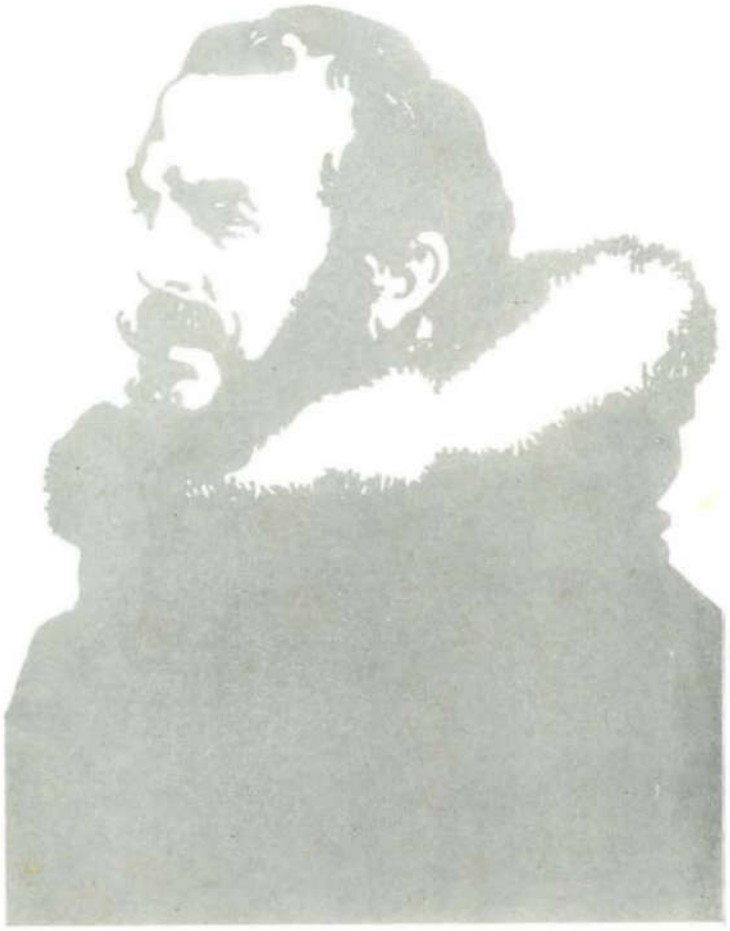
The Beaver

Baffin Island/Mount Loki A. Y. Jackson

SPRING 1967



"We look confidently to you for the solution of... the final problem in the geography of the northern hemisphere."

So wrote Governor George Simpson to John Rae, 19th century fur trader, physician and explorer, who made five expeditions to the Arctic, his travels adding much to geographic science.

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Hudson's Bay Company

INCORPORATED 2ND MAY 1670

The Beaver

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COVER: In Pangnirtung Pass, Baffin Island, looking from Glacier Lake west over Turner Glacier to Mount Loki, from a painting by A. Y. Jackson in 1965.

Photos of Jackson paintings by Notman & Son and John Evans

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HUDSON'S BAY HOUSE

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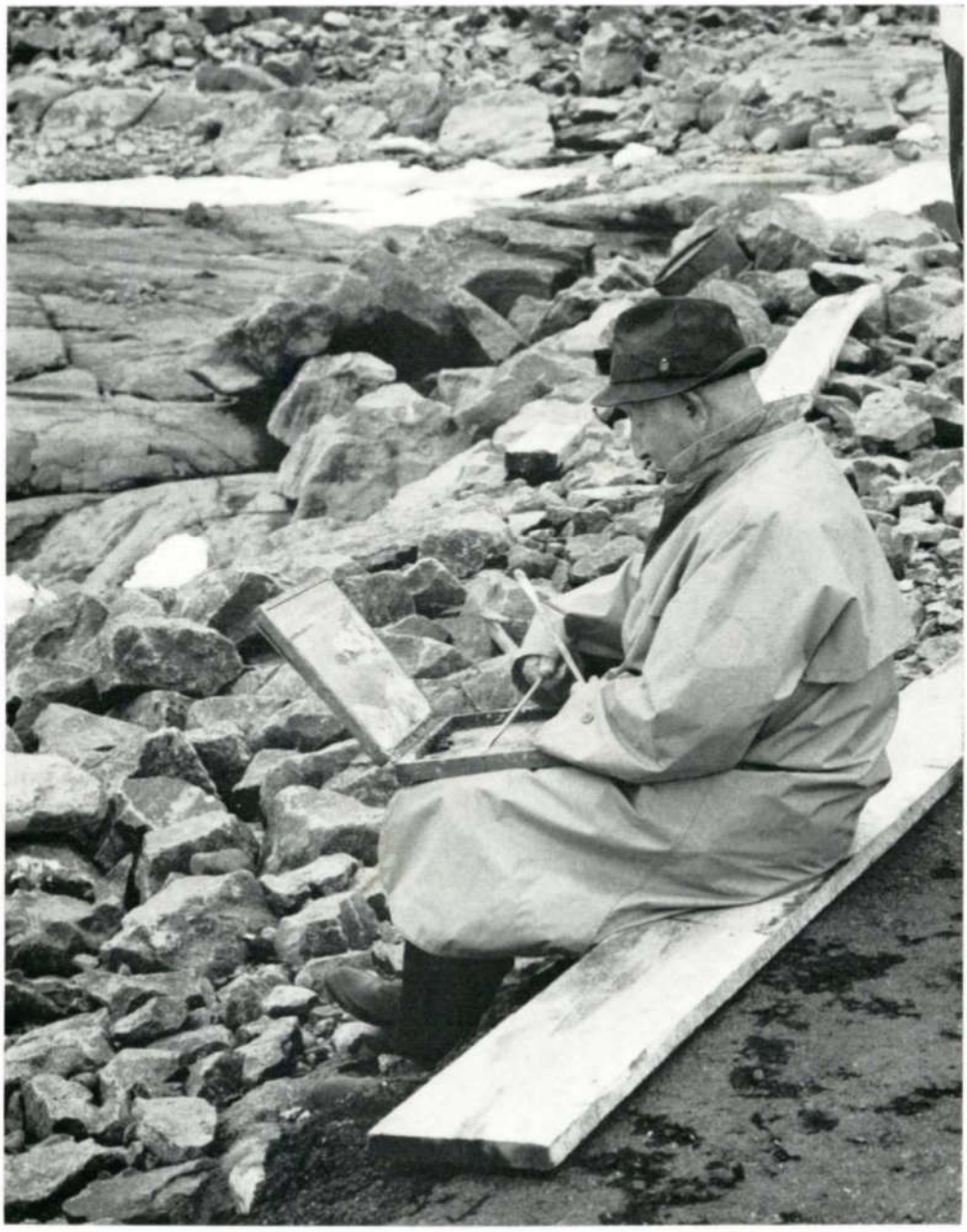
THE COUNTRY OF THE YOUNG

BY A. W. PURDY

A. Y. Jackson for instance
83 years old
halfway up a mountain
standing in a patch of snow
to paint a picture that says
"Look here
You've never seen this country
it's not the way you thought it was
Look again"
And boozy traders
lost in a dream of money
crews of homesick seamen
moored to a China-vision
hunting the North West Passage
they didn't see it either
The colours I mean
for they're not bright Gauguin
or blazing Vincent
not even Breughel's "Hunters in the Snow"
where you can get lost
and found in 5 minutes
—but the original colour-matrix
that after a giant's heartbeat
lighted the maple forests
in the country south
You have to stoop a little
bend over and then look up
—dull orange on a cliff face
that says iron deposits
olive leaves of the ground willow
with grey silver catkins
minute wild flower beacons
sea blue as the world's eye—
And you can't be looking for something else
money or a night's lodging on earth
a stepping stone to death maybe
or you'll never find the place
hear an old man's voice
in the country of the young
that says
"Look here—"

PANGNIRTUNG
16 AUGUST 1965



BY FRED BRUEMMER
FROBISHER BAY 1965

A. Y. JACKSON

In early 1965 I was planning a second Alpine Club of Canada climbing expedition to Pangnirtung Pass in Baffin Island and sent an invitation to A. Y. Jackson to join us. His reply was characteristic: "I am all in favour of joining your party . . . I don't require a lot of feather bedding" . . . and in a later letter "the only thing that may slow me up is fog!" This from the 82 year old dean of Canadian landscape painters.

So A. Y., his artistically talented niece, Geneva Petrie, and a keen amateur painter Dr Jim MacDougall of Montreal, were included among our mountaineers, who came from the United States and Canada — a happy party of fifteen altogether.

We had nearly four weeks of athletic fun. Weldy Phipps in his big-wheel Otter got us in on a very small flat landing strip at the summit of the pass, which cuts through some of Canada's most spectacular mountain scenery. And then there was some fog! Our first week saw low clouds and even a trace of snow one night, but the latter part of our stay provided a fine weather spell and all the glory that our Arctic can provide in summer.

No darkness; we could climb all day and night and often did — one expedition making the first ascent of a Matterhorn-like peak, Mount Loki, took us twenty-nine hours from a high camp. While most of us were matching our skill against the towering peaks of steep gneiss and snow, A. Y. was busy at his interpretation of this mountain world.

During our stay he completed more than thirty oil sketches, and he has been working during the subsequent winter on a good many canvases from these sketches.

I doubt if a season has gone by from 1919, after his stint as a First World War artist, that A. Y. has not been in the field — particularly in his beloved north country of Canada. Twice before he had been in the Eastern Arctic, and in Baffin Island — in 1927 and 1930. In 1965 he and Killabuk recognised each other at Pangnirtung with enthusiasm and an evening of reminiscences.

He is a wonderful raconteur of his experiences of more than fifty years of our north country. Our chilly tent was enlivened night after night by his stories and his humour. I can think of no other period that I have spent in the north that was happier or more intellectually satisfying.

P. B. Baird

1

Mount Asgard

BAFFIN ISLAND 1965

2

Baffin Island

FROM CAMP TOWARD HIGHWAY GLACIER

3

Shore Line

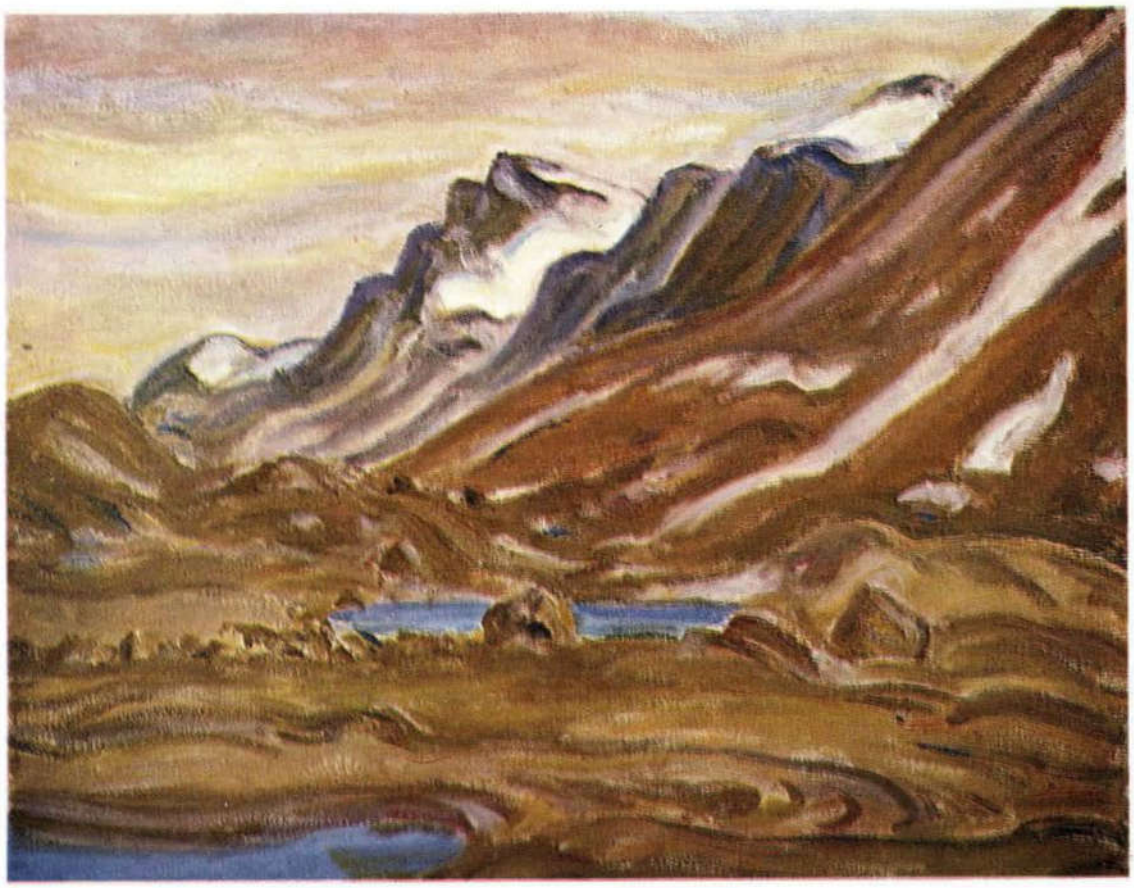
FROBISHER BAY 1965

4

Frobisher Bay Village

BAFFIN ISLAND 1963

5



Mount Battle

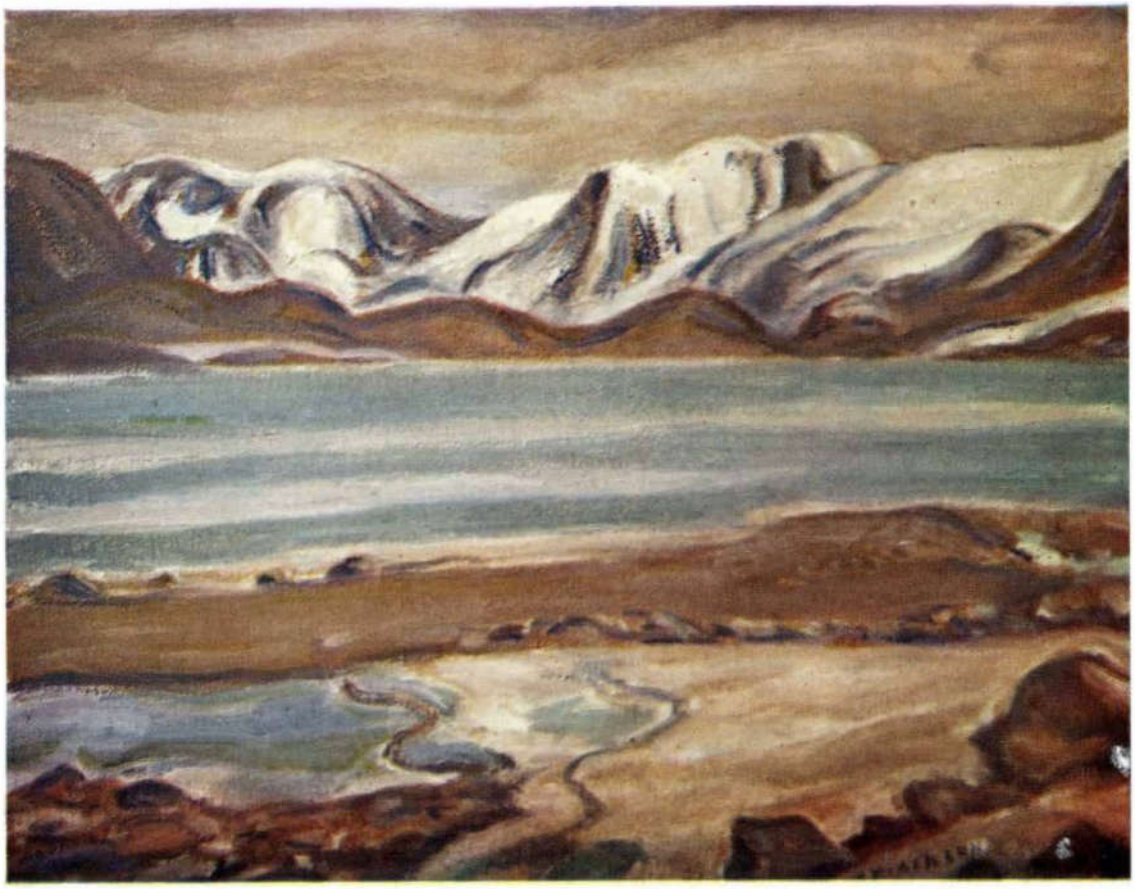
BAFFIN ISLAND 1965

6

Slopes of Mount Battle

BAFFIN ISLAND 1965

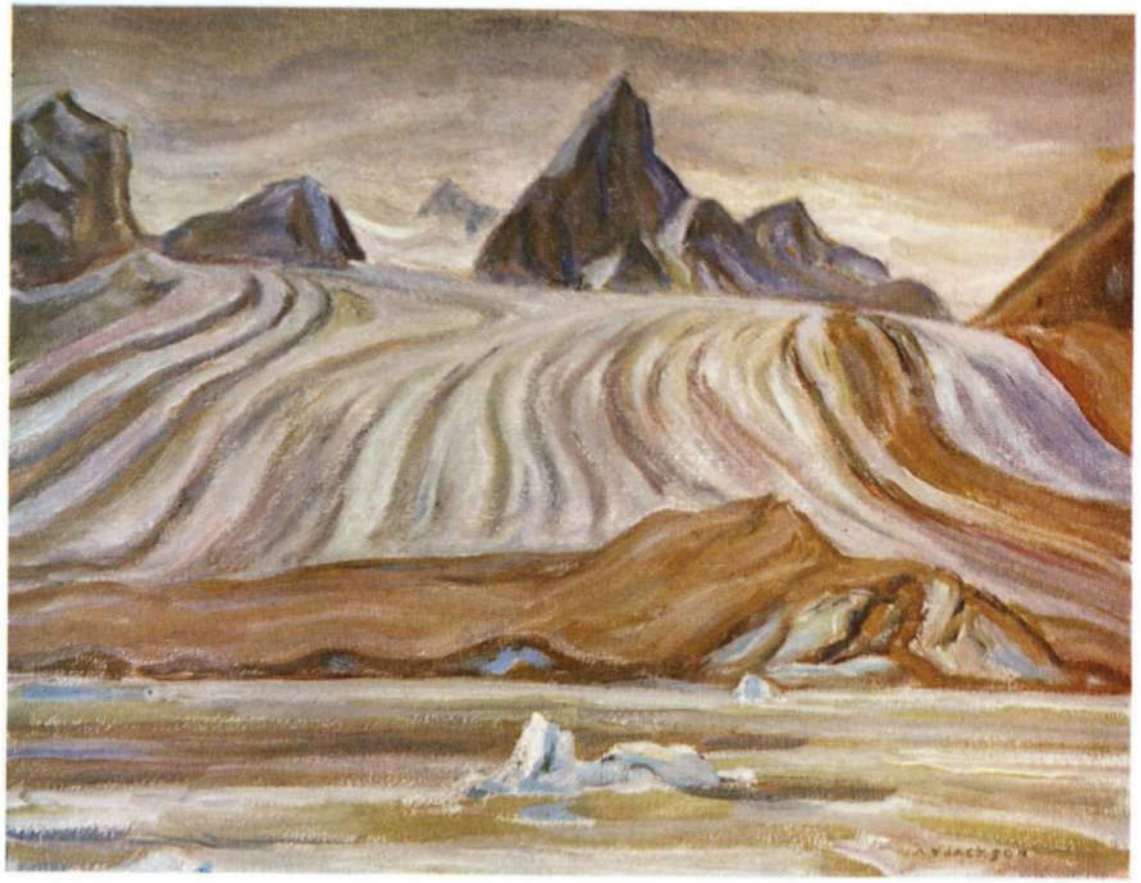
7



Glacier Lake Frozen

BAFFIN ISLAND 1965

8



Glacier Lake

BAFFIN ISLAND 1965

A PROFILE OF A. Y. JACKSON

by Naomi Jackson Groves

MY UNCLE A. Y. and I always enjoy concocting introductions for each other—or I should say, rather, that we enjoy listening to the introductions we concoct for each other, chiefly because we never know what will come next!

Here in Canada it is scarcely necessary to 'introduce' A.Y. any more. In the course of his long life, only fifteen years shorter than Canada's own existence as a nation, and in the course of his travels over the width and breadth—and height!—of the land, A.Y. and his works have become generally well known and appreciated. Probably more people have met him personally, have heard him speak and read things by or about him, have seen and perhaps acquired his works in the original or in reproduction, than is the case with any other Canadian artist. In the olden days, A.Y. helped to spearhead the Revolt of the Moderns; by now he is the Daddy of our Old Masters of the Twentieth Century. Since in this case the Daddy is also my paternal Uncle, this might be the time for a personal approach to the celebrated character. The following sketchy words can flank the brilliant array of A.Y.'s recent sketches in oil from far-off and fabulous Baffin, in much the same way as little figures or arabesques in the margins of rare manuscripts provide a sprightly accompaniment to more important central themes.

Almost all our glimpses into A.Y.'s life show him as a rugged individualist. Even at the advanced age of three, photographed in an immaculate white linen dress with scalloped embroidered edges and a wide tartan sash, shod in high button boots, and with silky fair hair curling down to his shoulders, A.Y. wears a really tough expression on his square chubby face. He has probably just finished telling the photographer what he thinks of his old-fashioned ways. . . .

A.Y. was born in Montreal in 1882, the third son in a family of four boys and two girls. Henry, or Harry, the eldest, whose eldest daughter I am, seems to have been A.Y.'s model and special pal during the formative years. Between Harry and A.Y. came Ernest, then Isabel, Bill and Katie. Harry and Ernest of course got bicycles before A.Y. was able to have one, and Ernest (doubtless under pressure), generously allowed young brother Alec to borrow his new bike—"but just for one ride, you hear?" So A.Y. got onto the bike and rode from Montreal all the way out to Ste Anne de Bellevue and back by way of the Back River—just one ride, of course, though it stretched for about fifty miles.

A.Y. and Harry seem to have inherited some good artistic genes from their maternal grandfather and A.Y.'s namesake, Alexander Young, schoolmaster in Western Ontario, a scholarly man who loved the out-of-doors. By 1900 the Jackson brothers spent many a weekend roaming the countryside around Montreal, sketching in watercolours. A.Y. did not begin to paint in oils until after he and Harry had made a trip to Europe in 1905, working their way over on a cattle boat and filling their brief stay with as many visits to art galleries and famous places as they could reach, mostly on foot. A.Y. did not get involved in the tender trap of matrimony as his brothers did, so he was able to save the money he earned the hard way, at commercial art, for further trips abroad to study and paint, from 1907 to 1909, and from 1911 to 1913. By 1915 he was back in France as a soldier with the Canadian 60th Battalion, wounded at Maple Copse in June 1916, and finally promoted to be official Canadian war artist, as he tells in a most entertaining chapter of his autobiography, *A Painter's Country*. We can picture him standing beside the great British painter Augustus John, observing a night attack at Liévin in

The author with A.Y. and her father, A.Y.'s elder brother Harry (H. A. C. Jackson) in 1948, with Peter the spaniel who liked to go on sketching trips with his master.

1917, carefully noting the colours of the fantastic flares sent up from the German lines. A.Y. has recently presented the National Gallery of Canada with two dozen diminutive pencil drawings made right at the front for working up later as 'war records'. It is always a surprise, in view of the grim subject matter, to see the exquisite colour and delicate patterning of the ensuing war canvases of 1918-1919. More people who like Impressionist landscapes from northern France should be aware of the thrilling array of them on the Sixth Floor at the National Gallery, where the War Records are constantly on view.

After completion of his variegated services for World War I, A.Y. settled in Canada for keeps and soon established the regular pattern of his life from then on. For the next thirty-five years or so, his headquarters consisted of a roomy studio, comfortably cluttered and full of character, in the by now almost legendary Studio Building in Toronto. The once peaceful sylvan surroundings of "25 Severn Street", with easy access to Yonge and Bloor, are now cut off and joggled by the Toronto subway; the place is a shaking shadow of its former self, and full of ancient ghosts. A.Y. had been the first occupant of the first studio in it to be finished—Number One on the ground floor, which he shared with Tom Thomson for a brief but glorious period just before World War I broke in upon that famous friendship. Jackson met Thomson for the first time in November 1913 and saw him for the last time in December 1914. Long before A.Y. got back from overseas, Thomson's body had been recovered from Canoe Lake in Algonquin Park and his brief blazing meteoric career as a painter was ended, an irreparable loss to Canadian art as a whole and to Tom Thomson's group of artist friends in particular. But quality and intensity, in genius as in friendship, are seldom dependent on quantities of time or long slow cultivation—quite the contrary, in fact. The activated love of our native wilderness, the hardy, self-reliant, outdoor life of the painter of the Precambrian landscape with its granite rocks and weathered hills, its clear lakes and rushing rivers, the flora and fauna of the spruce-moose biome, the lure of the North from zero February to zero November, with blazing summer and flaming autumn thrown in between for good measure, all became the Order of the Day for A.Y. and his friends in the 1920s.

We can understand how well suited A.Y. and his way of life were to each other; perhaps that is one secret of his perennial vigour. Each year from 1920 on, for more than a quarter-century, he would head off in March on his winter-spring sketching expedition down the lower St Lawrence River, sometimes alone, usually with a painting friend or two. They would put up for several weeks in the local hotel or boarding house of some village that suited A.Y.'s taste, on south shore or north, preferably an interesting location with wide vistas of rolling ploughed fields and pastures backed by the tough old Laurentians and flanked by the grand St Lawrence in various stages of freeze and thaw. A.Y. liked his village well set into its surroundings, clustered around its single-spired church, approached by a country road that rollicked through the snow amid long-rolling rhythms of snow-bedrifted ridges

and distant wooded slopes, with a dramatic sky above the high horizon.

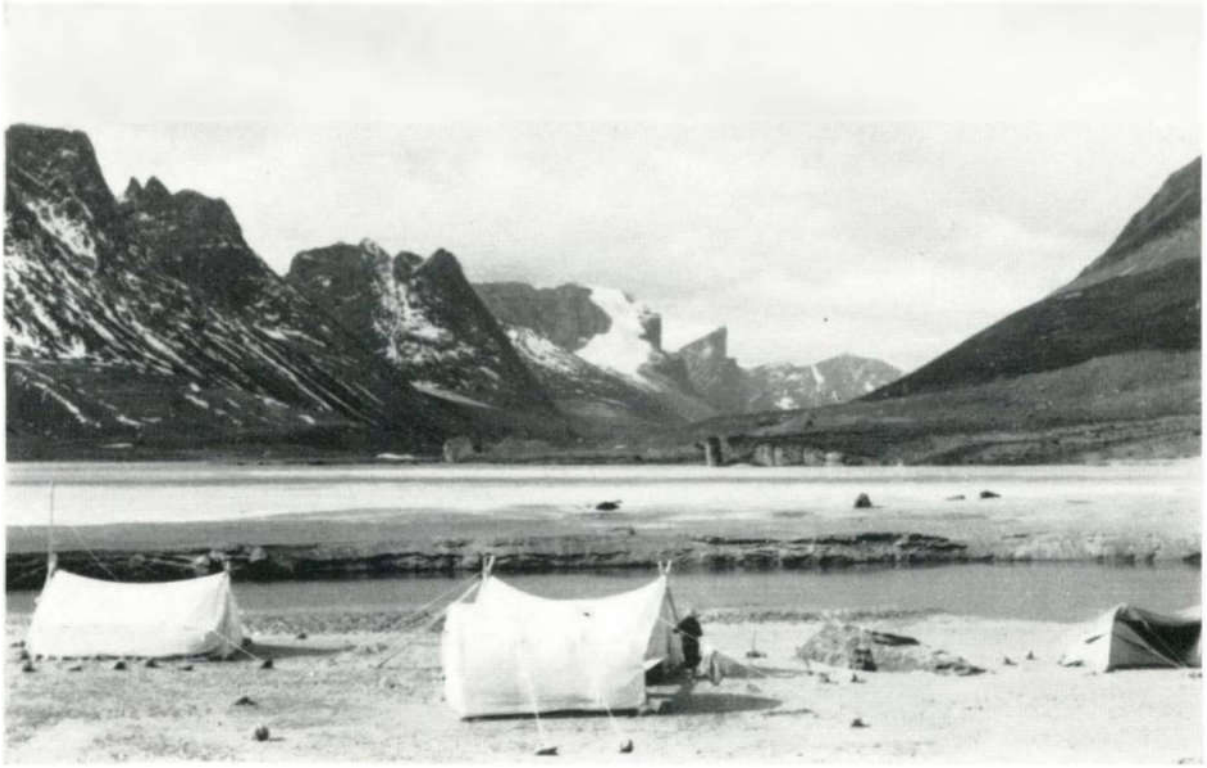
He would be up and away betimes in the morning, off on foot across the crunching snow, his bearpaw snowshoes strapped on top of his rucksack for use when the snow became softer later in the day. In the rucksack he carried his drawing-book for 'notes' and his handy lightweight little 'Jackson sketchbox', in which two birch sketch panels formed the cover, while the bottom served as palette. To save weight, the paint was already squeezed out around the edges, starting in the lower left corner with cerulean blue, then French ultramarine, viridian green and yellow ochre; in the upper left corner an immense gob of flake white; along the top chrome or cadmium yellow, cadmiums orange and red; rose madder or Thalo red rose, and finally burnt sienna—a simple range indeed with which to achieve the inimitable subtleties of Jacksonian snow, in which A.Y. is absolutely in a class by himself.

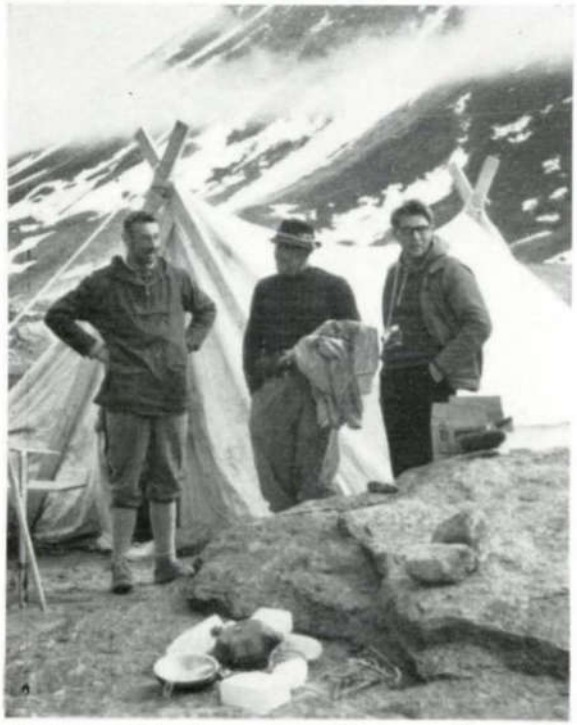
When all the sketch panels brought for the trip, somewhere between twenty-five and forty, were filled, some on both sides (which we later much bemoaned), A.Y. would head back by train for the big city, brown as a beaver, with squint-and-laughter wrinkles round his eyes and his usual cheery grin. "Here comes your tough old uncle!" he would announce as he hove into view at our home in Montreal West, while from us the shout went up: "Come see A.Y.'s sketches!"

What a thrill it always has been to undo the crummy old brown paper package or carton to reveal the pile of boards that smell so deliciously of fresh oil paint! He has them tightly lashed with string to keep them from slipping, but the rich areas of thick paint are well separated from each other by the device that A.Y. says his friend the late great Dr Sir Frederick Banting used to boast of as his "second discovery, almost as important as insulin"; namely the use of half-inch-long bits of wooden matches planted into the wet paint along the sides, with one or two in the middle, so that even the gleaming highlights are safe.

On A.Y.'s return to Toronto, Pearl McCarthy of the *Globe and Mail* would announce: "Spring's here—A.Y.J. is back!" and then the Toronto friends and fellow-artists in their turn would foregather for a look-and-talk fest. Soon A.Y. would set to work to paint up some canvases for various exhibitions—in the 1920s the Group of Seven shows, later the Canadian Group; the Academy, or the Ontario Society of Artists, or some special event such as the great show in England at Wembley in 1924 which led to A.Y.'s canvas *Entrance to Halifax Harbour* being acquired for the Tate Gallery, as well as to various flourishing feuds with critics and academicians. A.Y. has

Part of the 1965 Baffin Island camp by Glacier Lake looking southwest down Pangnirtung Pass to the peaks above Summit Lake. A.Y.'s tent on left, with cook and dining tents. GENEVA JACKSON PETRIE





Members of the Pangnirtung Pass expedition: Col. P. D. Baird, the leader (left), Dr Lyman Spitzer, and Dr Jim MacDougall. GENEVA JACKSON PETRIE

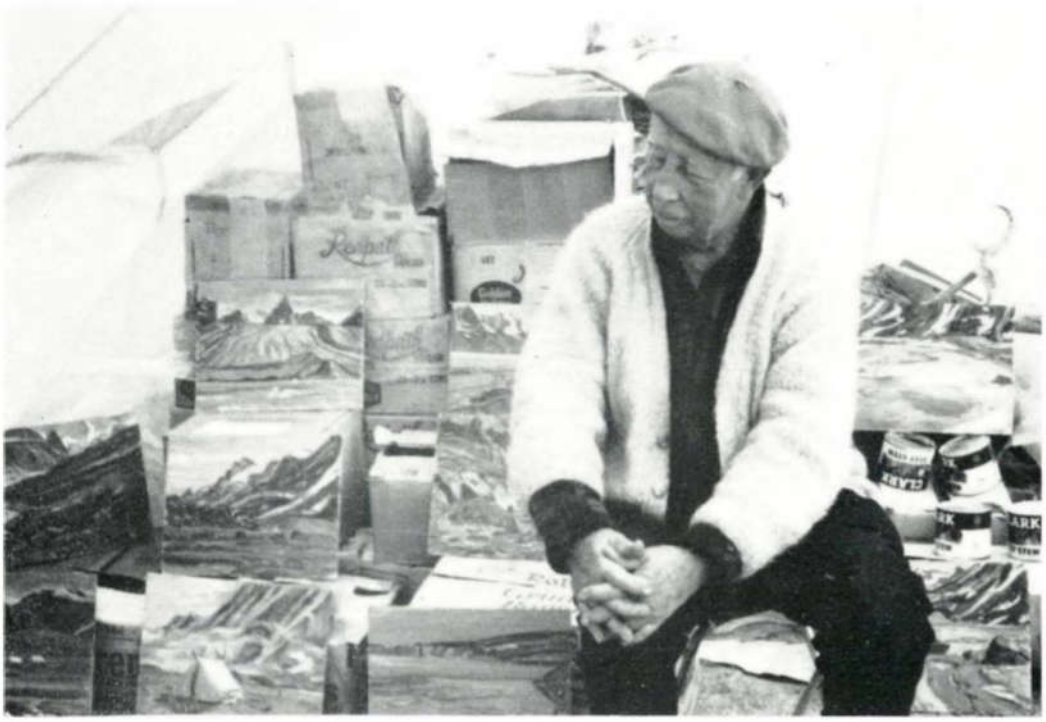
always enjoyed a good sparring match in the written word, and wields a lusty pen in letters to the press and articles for various Canadian periodicals. He is a great reader and letter-writer and also enjoys a good party, large or small. Indeed he seems able to take any amount of sociability, evening after evening. I recall one time, during the seven good years I taught at McMaster in Hamilton, when I phoned over to Toronto to hear how my unusually uncommunicative uncle was. "Oh," he told me in a weak sort of voice, "I'm able to sit up now and take a little nourishment." Then he chuckled and added that he'd been out seven times for dinner in the past week and what a good thing it was that there are only seven days in a week—a typical A.Y. train of thought, by the way.

For summer painting, A.Y. has never been fond of lush greens. Since away back in 1910 he has headed whenever possible for the rocky wind-swept islands and open views of Georgian Bay—"the land *le Bon Dieu* once made while on a holiday, out of sheer joy," as he once expressed it to his friend Fred Housser. Doing the hospitable rounds of friends and relatives, he manages to combine the many pleasures of summer vacation with "work" on a sketch or two a day. Usually there is also a camping-trip off on one of "the delectable islands," with canoe, tent, and a good supply of painting materials, food, and other necessities of life. Once, back in the 1930s, he took my friend Betty Maw and me for a wonderful ten days out on the Pine Islands near Go Home Bay. Betty and I had our tent in a spot protected by trees on three sides, so of course the wind blew hard from the fourth side and down came our tent . . . "Help, A.Y., help!" A.Y.'s own tough little tent, moored by a couple of logs and rocks in what seemed a much more exposed place, held through thick and thin. We had three open fireplaces on Pine Island, likewise depending on the direction of the wind. Behind one fireplace was a big flat rock which we used as a table, and under it was a nest of big dark snakes. Sometimes we could hear them rustling. A.Y. used to pour them a libation of nice warm shaving-water once in a while, and needless to say they never harmed us. He would be up long before us youngsters and have the fire crackling, the coffee-pot slung over it and steaming fragrantly, while bacon sizzled in the pan, or maybe some fresh-caught fish. Between meals we sketched the rosy granite rock, the blue and silver water, and the grand old wind-pushed pine trees. Good days, good memories, even a few good sketches. . .

Often in the summertime A.Y. would be farther afield on some special expedition. He was out in the Rockies in 1914, again in 1924, and up the Skeena River in 1926. In 1928 he paid his first visit to Great Slave Lake; by 1938 he began heading farther north up to Great Bear Lake and the Barren Lands. For several summers in the 1940s he conducted landscape painting classes at the Banff Summer School, followed by visits to the Cariboo, up the Alaska Highway on a government commission, and to the southwest corner of Alberta, making his headquarters with his brother Ernest's family in Lethbridge. He loves the "Alberta rhythms".

During our glorious Canadian autumn, the spacy hinterland of Ontario has provided a favourite hunting ground for A.Y. and his friends from the time of Tom Thomson onwards, as the many sagas in *A Painter's Country* recount. On one or two other happy occasions A.Y. joined his brother Harry at our country place at St Aubert on the lower St Lawrence, and the two spent a companionable month or so together, shadowed by Peter, our cocker spaniel, until freeze-up time in November. A.Y. likes the light effects in the late fall, when the low sun casts deeply modelled shadows across the sombre land, etching the smoky grey of leafless maple bush and the last russet shreds on birch and beech trees. There is a dark metallic gleam to everything, with pewter-coloured skies and pale gold flashing watery reflections.

There have been three big trips for A.Y. to the Eastern Arctic. The first two—in 1927 with Dr Banting and in 1930 with Lawren Harris—were aboard the sturdy old



A. Y. Jackson exhibition—Baffin style. GENEVA JACKSON PETRIE

Beothic as she did her rounds through storm, ice, and fog. The third, whose fruits we are enjoying in the present publication, saw the hardy eighty-three-year old painter facing up to Baffin's epic themes once more, under conditions certainly no warmer than his 'winter-spring' weather of long ago, and with no warm hotel or ship's cabin to retire to at night. Like a tough old troglodyte crouching among the boulders by the frozen lake, A.Y. was only bothered when fog obliterated the grandiose subjects. The doctor on the Alpine Club's 1965 expedition up behind Pangnirtung, Dr Jim MacDougall, shared a tent with A.Y. and heard him talking to himself early one chilly morning: "Fog, fog, fog!" muttered A.Y. after a glance past the tent flap. "It's enough to make you swear. In fact I think I *will* swear . . . Damn! . . . Now I feel better."

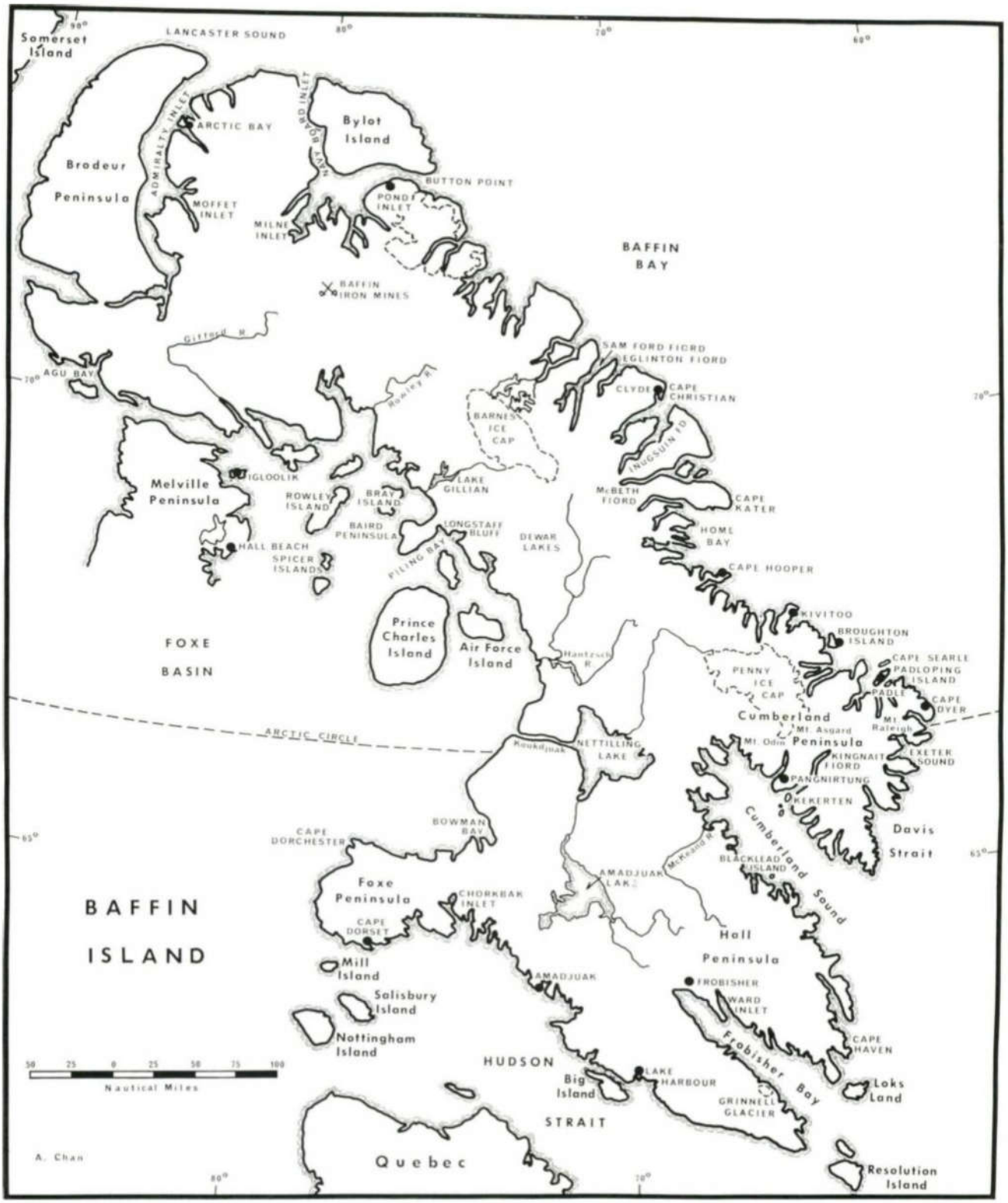
The passing years have brought many good times and a few bad ones too, to this character who is definitely not the moss-growing type of stone. Honours heaped upon him—five or six doctorates, the Order of St Michael and St George, Canada Council medals and such—have not weighed too heavily or stopped him from working or dried up his sense of humour. He gives a great deal of his time speaking to groups, and is a marvelous raconteur, entertaining with equal ease the highbrow ladies of the National Gallery Association, a gathering of diplomats and dignitaries at a party in Rockcliffe, three hundred student teachers at an Ottawa Normal School, or his grand-nieces and nephew and their friends in Manotick, outside Ottawa . . . "Draw us another owl, Uncle Alec!"

A.Y.'s spontaneous humour is of a concrete visual type. He never fails to come up with a funny answer at the drop of a hat. And speaking of hats, A.Y. has had some of the best. There was his ripe old brown suede hat that had been to the Yukon several times and on the 1965 flight to Frobisher Bay got lost somewhere during the night. A great search by all the mountain climbers finally located it under A.Y.'s own feet, slightly more battered than before. "Not hurt a bit", says A.Y. clamping it on his head. "Nothing can hurt that hat, it's my best."

And the other evening, leaving a cheerful family party out in Manotick, A.Y., who now lives in Ottawa in a convenient, character-filled, old wood-panelled apartment, flourished his best brown hat in farewell, and put it back on—backwards.

"A.Y., your hat's on backwards . . . Whatever would you do if you had no nieces to tell you your hat's on backwards?!"

"Well," says A.Y. "by now I'd probably be walking backwards. . ." Which—as his own works prove—is happily not the case. ◆


Somerset Island
LANCASTER SOUND
90°
80°
70°
60°
ADMIRALTY INLET
ARCTIC BAY
NAVY BOARD INLET
Bylot Island
Brodeur Peninsula
BUTTON POINT
POND INLET
MOFFET INLET
MILNE INLET
BAFFIN BAY
BAFFIN IRON MINES
Gifford R.
SAM FORD FIORD
EGLINTON FIORD
AGU BAY
Rowley R.
CLYDE
CAPE CHRISTIAN
BARNES ICE CAP
INUGSUIN FD
IGLOOLIK
Melville Peninsula
ROWLEY ISLAND
BRAY ISLAND
LAKE GILLIAN
McBETH FIORD
CAPE KATER
BAIRD PENINSULA
LONGSTAFF BLUFF
DEWAR LAKES
HOME BAY
HALL BEACH
SPICER ISLANDS
FILING BAY
CAPE HOOPER
KIVITOO
BROUGHTON ISLAND
FOXE BASIN
Prince Charles Island
Air Force Island
Hantzsch R.
CAPE SEARLE
PADLOPING ISLAND
PENNY ICE CAP
PADLE
CAPE DYER
Cumberland Peninsula
Mt. Asgard
Mt. Raleigh
Mt. Odin
ARCTIC CIRCLE
Kouk djuak
NETTILLING LAKE
KINGNAIT FIORD
EXETER SOUND
PANGNIRTUNG
OKEKERTEN
Davis Strait
65°
CAPE DORCHESTER
BOWMAN BAY
McKeand R.
BLACKLEAD ISLAND
Cumberland Sound
AMADJUAK LAKE
Foxe Peninsula
CHORKBAK INLET
BAFFIN ISLAND
CAPE DORSET
Hall Peninsula
Mill Island
AMADJUAK
FROBISHER
Salisbury Island
WARD INLET
Nottingham Island
CAPE HAVEN
Frobisher Bay
HUDSON
LAKE HARBOUR
Big Island
Loks Land
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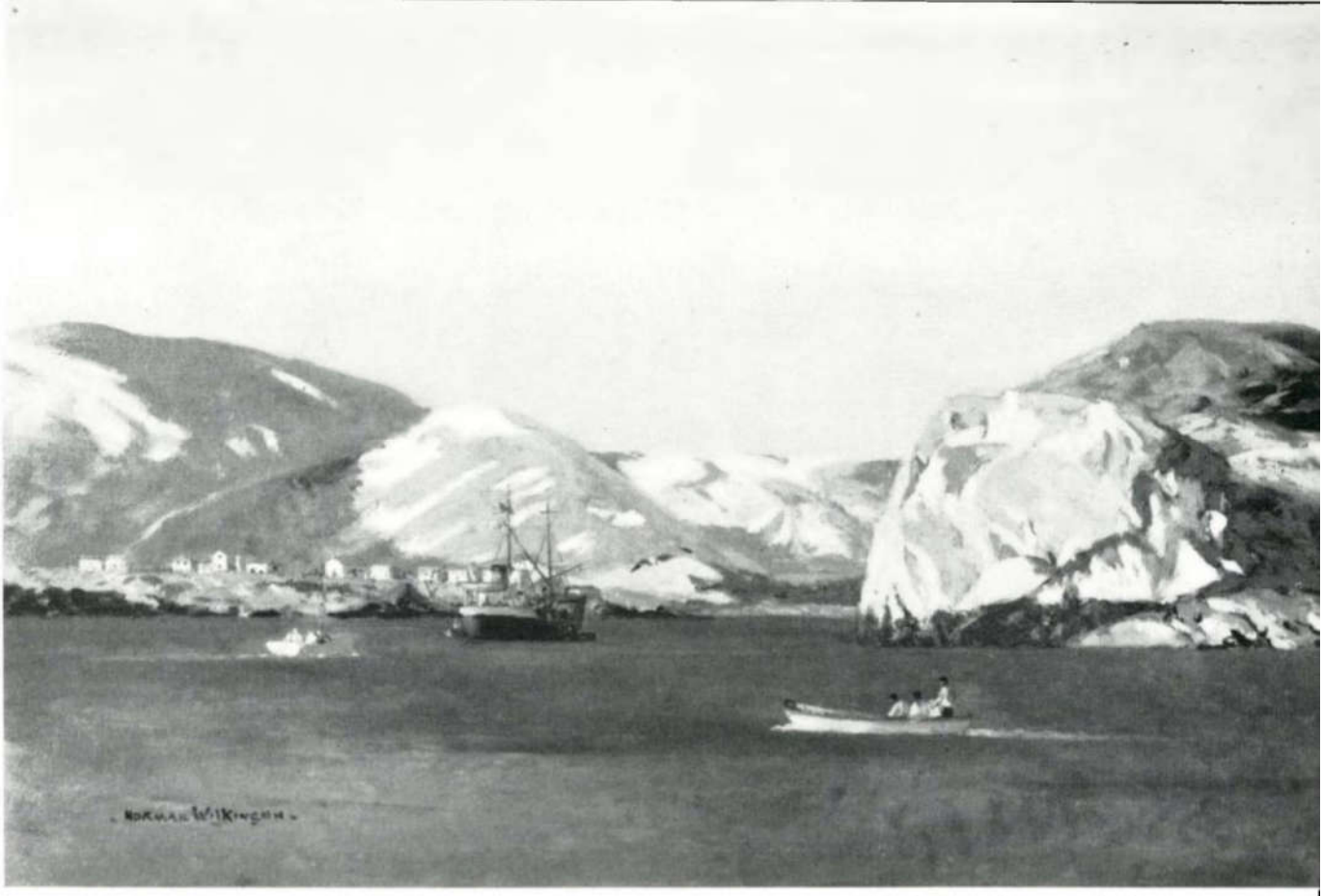


Lake Harbour, from a painting by Norman Wilkinson.

BAFFIN ISLAND

BY P. D. BAIRD

THERE ARE TWO ISLANDS in the world for which I have a particular love. One is the Isle of Skye, the most mountainous and romantic island of my native country—the other is Baffin Island, also mountainous, not quite so romantic but maybe I can help to make it so in this account. It was the first part of Canada I saw or set foot upon, a third of a century ago and I hope I will be able to keep on visiting it for many years to come.

Baffin is one of the greatest islands of the world: in size coming behind only Madagascar, Borneo, New Guinea and Greenland; larger than any European country except France. It stretches over twelve degrees of latitude and is just short of 1,000 miles from its north-western cape to southeastern extreme.

In a country the size of Baffin we can expect, and in fact find, a great variety of land forms—from Alpine type mountains and deep steep-sided fiords, to the flat plains which characterise some of the western region.

Geologically, the major portion of the island is of Precambrian age rock, chiefly gneiss with some highly altered sediments which result in bands of marble and iron-rich ores. But on the Foxe Basin coast, with two outlying patches near the head of Frobisher Bay, we find exposed Palaeozoic limestone rocks akin to those of other parts of Hudson Bay. Then there are some tiny patches of later (Tertiary) deposits, near Padloping Island and the Pond Inlet and Bylot Island shores.

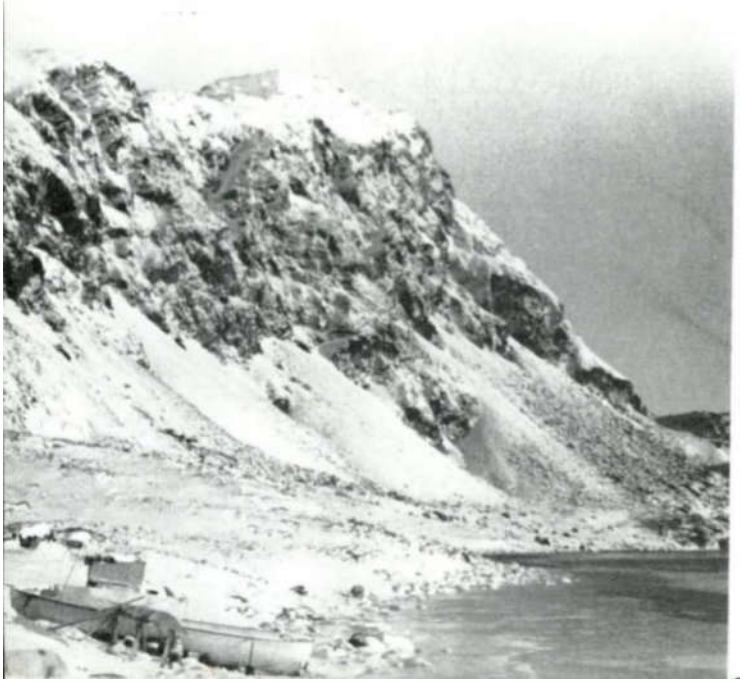
It is likely that in the Tertiary period the great uplift of the eastern mountain rim occurred, together with the depression of Baffin Bay. This uplift caused tear faulting in the old hard rocks, creating lines of weakness which now show in the deep fiords where the glaciers of the

Mr Baird, author of "The Polar World" 1964, has made seven trips to Baffin Island, twice planning and leading large expeditions for the Arctic Institute of North America, of which he was the first director in Montreal. After the war he commanded the army's Exercise Muskox taking a group of vehicles from Churchill north and west through the Arctic. In 1953 he was awarded The Founder's Medal of the Royal Geographical Society for explorations in the Canadian Arctic. He is now director of the Gault Donation, McGill University.

MAX SAUER

Some of the varied aspects of Baffin Island are seen in these photographs showing the rolling uplands of the interior (above), fiords on the east coast in the vicinity of Clyde (opposite page) and a beach at Moffet Inlet (below) in the far northwest.

Pleistocene period were able to erode their sensational channels. Few of the fiords have been sounded, but in 1964 the *C. D. Howe* obtained echo soundings in Inugsuin Fiord, which at its deepest was 2,000 feet where it was flanked by mountains up to 5,500 feet in height. This uplift was associated with a small amount of volcanic activity which is revealed by volcanic tuffs and lava in one small area near Padloping Island—the extreme western end of a volcanic rift which we can trace on both coasts of Greenland at about the same latitude and over to Iceland's fires, which are still not extinguished. Around Pond Inlet at this (Tertiary) period vegetation was flourishing to such a splendid extent that deposits of coal have since formed and are being mined today.



The Pleistocene ice age buried Baffin beneath a cold shield of ice. How often the glaciers formed and retreated is difficult to establish. We are here too close to the heart of the matter—only at the ice sheet's landward margins is it possible to trace the march of events. We do believe, as a result of recent investigations by the government Geographical Branch, that the extensive plains of recent materials north and south of Clyde were laid down some 30,000 years ago at an interglacial period. The end of the last glacial period (9,000 to 10,000 years ago) saw the whole of the island buried beneath a vast ice cap extending to the St Lawrence and Mackenzie rivers and maybe 15,000 feet thick over Hudson Bay. This seems to have shrunk very rapidly during the next 2,000 years—shrinking, though, mainly from the southwest, first uncovering Hudson Bay and its shores and Foxe Basin into which poured the sea, whose waters reached 300 feet higher than now on Baffin's western coast due to the depression of the solid land under the recently removed vast weight of ice. But eastern and central Baffin was still ice covered, albeit the fiord heads were coming out as land. Ice seems to have still reached the sea at the head of Sam Ford Fiord about 6,000 years ago. For the next few thousand years Baffin's ice continued to dwindle, so that we are left today with only the Barnes Ice Cap as the last surviving relic of the great ice sheet which once stretched from here to New Jersey, and with the glacier covered eastern highlands.

These highlands are the parts of the island that most visitors both past and present have seen, and where in fact the majority of the native population have always lived, though at sea level. The highest parts of Cumberland Peninsula reach to just over 7,000 feet, further north the average summit level is about 5,000 but some places such as near Clyde and on Bylot Island approach or pass 6,000 feet.

R. PHILLIPS

Many of the longer fiords cut through this mountain belt to the more gently rolling midland, whence the altitude descends gradually to the low ice-infested shore of Foxe Basin. Two huge lakes, which can be scored with the world's largest, Nettilling, 2,200 square miles, and Amadjuak, occupy the southern midland and drain via the Koukjuak (great river) into Foxe Basin. This is a bankless river, never less than a mile wide, which floods miles each side of its 50 mile course in the big spring run-off, and maintains a strong current all year, draining as it does, this tenth of Baffin's whole area. T. H. Manning has estimated its summer flow at half that of Niagara, and it is possible that it is a very "young" river and that originally the whole basin drained into Cumberland Sound.

The northwestern portion of the island is quite different. Here essentially is a dissected plateau about 2,000 feet in altitude. Brodeur Peninsula in particular has mostly sheer cliff coasts and deep canyon-like rivers. The rocks here and of neighbouring Cockburn Land are mostly Ordovician or other Palaeozoic sediments.

HISTORY

As we have seen, probably less than 10,000 years ago the first portions of our island came free of the all enveloping ice sheet. Maybe a few mountain tops, maybe a few small areas of land such as the area just north of Clyde, were bare before then, and carried surviving plants and animals, but essentially the history of all life, especially that of man and the higher land animals begins at this date

The first human habitants were the Dorset people, Eskimoid in culture, if not necessarily in speech, whose traces have been found on much of the island, and whose dogless, non-whale-hunting culture artifacts were first described by Diamond Jenness from Baffin's Cape Dorset. These primitive folk must have been here when Leif the son of Red Eirik of Greenland and his successor colonists first touched on these shores. White foxes, flat stones, cliffs were how these hardy Norsemen described our land: it was not habitable, as were the pleasant green fiords of Greenland, but Helluland (or the Vestri Obygd) as they named it, was a fine area for hunting seals and bears and as such was certainly well used during the several centuries while Norse Greenland flourished. During these years a new wave of Eskimo people pushed into Baffin—the Thule people, ancestors of our present inhabitants—whale hunters essentially, and dog drivers, more skilled at living in this fierce land than their Dorset predecessors and, it seems, more aggressive, as their first contact with European man in the sixteenth century shows.

Baffin Island's more certain history begins in 1576 when, for a period of less than 60 years, there was a powerful British urge for the discovery of the Northwest Passage. In that year Martin Frobisher explored his Bay, which he thought was a strait, lost five men ashore who, since his relations with the Thule Eskimos rapidly worsened, probably did not survive. Unfortunately he brought back rock specimens which an incompetent assayer believed to contain gold, and his subsequent two local summer expeditions were entirely devoted to trying to extract useless ore. The trenches his men dug in 1578 can still be seen today.

Next Northwest Passage searcher was John Davis, whose name stays on the strait between our island and Greenland. He found Cumberland Peninsula and Sound, named Mt Raleigh, Cape Dyer, Exeter Sound, and reported "the furious overfall"—the outgoing current of Hudson Strait, through which the unfortunate Henry Hudson passed on his last voyage in 1610.

Next came Baffin and Bylot in Hudson's 55-ton *Discovery*, the men who gave their names to our island

H B C ships "Prince of Wales" and "Eddystone" bartering with Eskimos off the Savage Islands, Hudson Strait, in August 1819, drawn by Robert Hood. COVERDALE COLLN., CANADA STEAMSHIP LINES

and its northeastern subsidiary island. They sailed together, Bylot the master, Baffin the navigator, yet it is the latter—the more articulate—who has scored the lion's share with the largest island in the world to bear an individual's name. He was tremendously in advance of the normal navigational skills of his age, measuring a lunar culmination in Hudson Strait in 1615, and making magnetic observations which can even now tell us about 17th century variations in this area.

In 1616 Baffin and Bylot performed the amazing circuit of Baffin Bay, but at such an early season that on the Baffin Island side "wee had a ledge of ice between the shoare and us" (13th July). Baffin's map of the bay has not been preserved, but it is this voyage 350 years ago which we credit as the first rough delineation of the whole eastern shore of the island.

Fifteen years later Foxe and James both coasted Baffin's southern shores and the former got as far as Cape Dorchester, but not being the precise navigator that was Baffin, his latitude error of 80 miles stayed on the charts until this century.

From this time, 1631, for another 175 years Baffin Island was neglected. It appeared on the maps as "James Island". Hudson's Bay Company vessels sometimes traded with the natives of the "Savage Islands" located between Big Island and Resolution Island, on their voyages through Hudson Strait, but that was all.

Then after the Napoleonic wars came the renewed thrust by the Royal Navy for the Northwest Passage. John Ross in 1818 did little more than retrace Baffin's 1616 voyage but gave some good Scottish names to the eastern coast on his homeward voyage. Parry, his lieutenant in 1818, pushed energetically further the next year and, after wintering on Melville Island, came back along Baffin's eastern shore, pausing briefly at Clyde River where he contacted in friendly fashion the local Eskimos. Parry was on Baffin's coast again in 1822-23 at the northern extremity of Foxe Basin, and wintered 1824-25 on the northwest coast.

After Parry however, Baffin Island became neglected. It was but a place to press beyond for the passage search, but it became through the nineteenth century a land of havens for the whalers of Scotland. Pond Inlet, as early as it could be reached and, during the late summer, the east coast of Baffin were the places for the profitable whale fishery as the huge mammals moved on their annual migration.

All through the nineteenth century it was the age of the whalers on Baffin. In 1868 there were at least thirty vessels plying in the area; by 1877 this was reduced to thirteen, all steamers and all from Dundee. Each skipper had his pet harbour, each his favoured whaling ground.

The New Englanders were also active from the middle of the century, and their whalers were in Cumberland Sound regularly until 1870. C. F. Hall, seeking to solve Franklin's fate, was taken to Frobisher Bay by an American whaler in 1860, and their activities did not cease until this present century.

But by 1900 northern whaling was in decline. Oil was no longer valuable, only whalebone (baleen), and in 1906

this product was eliminated by the substitution of artificial materials for ladies' corsets, soon themselves to perish.

In the late 19th century, while whaling was going downhill, the scientific investigation of Baffin really began. In 1881 the first International Polar Year was proposed, and the German Empire participated with a wintering station in Cumberland Sound. And Canada had—nothing; our country, only recently federated, was still unconcerned about its northern extensions, and unprepared as yet, to take even the most hesitant steps in this direction. Baffin Island was an area of Scottish, American, and German influence throughout the 19th century.

Two important men were associated with the German Polar Year station at Kingua—Ludwig Kumlein, the naturalist, and Franz Boas, ethnologist, who arrived for a year after the main German party pulled out, and gave us a new and excellent insight into Baffin Island of the 1880s, as a result of extensive travels supplemented by native information.

In 1880 Britain handed over the rather vague possession rights of Baffin Island to the young Dominion of Canada, so one can say that the Canadian period now commences.

Whaling was failing, nevertheless many of Baffin's native people were strongly tied to this enterprise and the "trade wages" that it produced. Now, however, came a new influence, the Protestant mission, led by the Reverend E. J. Peck, long previously resident on the Eastmain, and the man who gave the Eskimos literacy, albeit, unfortunately, in adapted Cree syllabics. Peck established his mission in 1894 at Blacklead Island in Cumberland Sound, one of the shore whaling stations, and it was his influence that has made most Baffin Island people firmly "Anglican" Christians.

At last the Canadian Government became aware of its northern heritage and involvement. In 1897 Commander William Wakeham worked in Hudson Strait. In 1903-4 A. P. Low, the man who, on foot and snowshoe, had opened up Ungava, was given command of a government expedition to "colonise" our north. He found three land-based whaling stations in Cumberland sound—Blacklead (with its mission also), Kekerten, and Cape Haven, the failing last American (Boston) station—and in the north summer whaling ships from Scotland in Pond Inlet.

Low was succeeded by Captain J. E. Bernier, our greatest French Canadian arctic explorer, in the "flag showing" operations of the early twentieth century. A large part of Bernier's work lay beyond Baffin but he spent much time around the northern coast and wintered in 1910-11 at Arctic Bay, his men exploring much new territory. Later he commanded the government annual supply missions to the area until 1925.

One of Bernier's men, his second officer in 1910, was Robert Janes, who became so fascinated by Pond Inlet that he returned there as a trader and prospector, succumbing eventually to madness and death at the hands of a justifiably homicidal Eskimo.

The whalers and the missionaries had been followed, in the oft-repeated sequence, by the national government. The whalers had traded for years with the natives—the

H.M.S. "Resolute" and "Assistance" with a group of Scottish and American whalers nipped in the ice in northern Baffin Bay, in July 1852 when one of the whalers was wrecked, drawn by G. F. McDougall of "Resolute".

GEORGE ANDERSON

Eskimos at Kingua, Cumberland Sound, with a half-grown Greenland whale they had killed in the fiord, twenty years ago. The dark triangle is baleen.

J. CANTLEY

Lake Harbour in the winter of 1918-19 with the schooner "Nannuk" in winter quarters on the beach and pelts, taken out in bundles by the women, drying on the lines.

Hudson's Bay Company, navigating Hudson Strait for centuries, had been only interested in a desultory way with trade on Baffin. But a Newfoundlander in the company service, Ralph Parsons, altered all this. He was responsible for establishing the first truly Arctic trading post (Wolstenholme) in 1909, then two years later, Lake Harbour on our shore, and another two years later Cape Dorset. The white fox was beginning at last to have some value as a trade fur.

After World War I settlements on Baffin increased rapidly. The Hudson's Bay Company established at Pond Inlet, Amadjuak, and Pangnirtung in 1921, Clyde 1923 and Arctic Bay 1926. James Cantley from Lake Harbour had an out-post in Frobisher Bay from 1914 onwards.

Meanwhile Canada was attempting to establish her rights to this northern empire, thrust unwittingly into her lap. Throughout the twenties of this century a devoted band of Ottawa men were working, scientifically as well as administratively in our area. All work came to an end in 1930 with the depression.

Let us look at the Canadian Government's efforts on Baffin Island in the twenties. Founded usually on the heels of the Hudson's Bay Company were the posts of the R.C.M.P.—Pond Inlet 1922, Pangnirtung 1923, Lake Harbour 1927. These policemen had to attend to all government business: births, deaths, assistance to the destitute; to be mailmen, magistrates, and so on. We had some fine men in these times, powerful travellers by boat or dog-team. Major L. T. Burwash, surveyor, 1923-24; J. Dewey Soper, biologist, 1924-26; Lud Weekes, geologist, 1926-27; all, sent by the government, were winterers at Pangnirtung who did much to explore the southern section of the island. And Dr L. D. Livingstone, the first government medical man for the North, in 1926-27 and again the following winter sledged from the south coast to Bylot Island. There were giants in this time; Lofty Stewart of the Hudson's Bay Company was another who, later, established a golf course at Pang! And Kilabuk, the young Eskimo who helped these travellers in the twenties, was the mainstay of Pangnirtung post until his retirement in 1964. In '65 he welcomed a returning visitor, A. Y. Jackson, our great Canadian painter, who was previously there in 1930.

Soper was back in 1928-29 prosecuting his search for the then unknown breeding grounds of the blue goose, which he successfully found in the hinterland of Bowman Bay. Here two American expeditions led by D. B. MacMillan and G. P. Putnam had done useful work correcting, after just three centuries, Foxe's erroneous latitude of Cape Dorchester.

But even in 1930 there were many unsurveyed parts of our island. When this writer sailed into Eglinton Fiord with J. M. Wordie's expedition of 1934 we thought as we turned new corners "can this go right through the island?" It could have but it didn't. Wordie was back in 1937 investigating other deep eastern fiords, but it remained for Manning's expedition just before the Second World War to trace the last portions of Baffin's west coast. Even he missed seeing, out in Foxe Basin, the 4,000 square mile Prince Charles Island, which was logged

Rev. E. J. Peck, 1916, and Ralph Parsons in Labrador.

Lake Harbour, 1918-19.

by the R.C.A.F. as late as 1948, though it had been "reported" twenty years before by Captain Poole of the *Ocean Eagle* operating out of Churchill.

One earlier explorer had visited this rather barren west coast. Bernard Hantzsch, an ornithologist, in 1909 had sailed to Blacklead Island on a Mission-chartered Dutch schooner. This sank a short way from Blacklead; not many of her stores except Hantzsch's were salvaged. A difficult winter followed with low provisions and eight extra mouths to feed. With German stubbornness Hantzsch held on selfishly to much of his outfit, and in the spring of 1910 left with two Eskimos for the west. Here, after penetrating north of the river named after him, he died, but his companions struggled back to Blacklead with his journals.

CLIMATE AND WILDLIFE

Despite the latitudinal spread of Baffin its climate is remarkably uniform. The lowest midsummer temperatures, in fact, are recorded from Resolution Island off its southernmost extremity. But it is all arctic, do not let us forget that, and more than half of it is north of the circle, where midwinter sunlight is scarce. Temperatures above 70° in summer or below —50° in winter are rare, showing the slight ameliorating influence of the eastern sea. Since Hudson Strait is frequently the seat of a low pressure area in the summer, the southern parts of Baffin get a higher rainfall than many other portions of our north, and low fog can plague the cool coastal belt, while inland at the fiord heads warmer and sunnier conditions often prevail, such as the head of Clyde Fiord where in 1950 we found a near-oasis of vegetation compared to that of cooler coastal areas. Yet on the highest areas such as the Penny Ice Cap we have a glacial climate where the above-freezing temperatures during the year can be measured in *hours* only.

Baffin is the only one of our arctic islands which can be said to face an open sea; true, this sea (Baffin Bay and Davis Strait) is plentifully ice-clogged in winter, nevertheless it has an effect on the faunal population in comparison to other Canadian islands.

In these eastern waters we have, uniquely, the narwhal, the Greenland whale now sadly diminished in numbers from its former population, the bladdernosed seal, and greater numbers than elsewhere in the Canadian north of white whales (beluga) and walrus, and certain sea birds which are only present on Baffin's stark eastern shore, and use the rich feeding grounds off it.

The late-lasting land-ice cover apparently prevented muskox from reaching Baffin. Man and muskox perhaps arrived together, and primitive hunting man was a match for the *ovibos*, which has survived only in the most uninhabited tundra. But the fleeter caribou has survived and Baffin's herd did not suffer the same disastrous decline in the 'fifties that affected the mainland herd which is now happily recovering. Nevertheless Baffin's caribou grounds have never supported great numbers, and most of them have been on the northern and western parts which have been comparatively inaccessible not only to white explorers but to the native people also.

Both east and west coasts of Baffin Island are thronged with arctic breeding birds. The east coast has some of the biggest breeding colonies of fulmar petrels. At Cape Searle near Padloping, Wynne-Edwards estimated be-

tween two hundred and five hundred thousand. There is another colony at Admiralty Inlet and other smaller ones in Cumberland Sound and south of Cape Dyer. At the latter place (Exeter Sound) there is a large murre colony and a huge congregation of these birds at Cape Graham Moore just north of Button Point on Bylot island.

The low west coast of Baffin with innumerable swamps and grassy areas is the haunt of geese, ducks and waders, in great quantities. The Soper bird sanctuary has been established here for the protection of the many breeding species.

All over the island the four or five common passerine species breed and even apparently exotic species like the little brown crane, fly as far north as Pond Inlet.

THE PEOPLE AND THEIR SETTLEMENTS

After Frobisher's first disastrous contact with the people of Baffin Island we know nothing of them for a century. Then for 150 years the Hudson Bay trading vessels had sporadic contact with the strait dwellers at Lower, Middle and Upper Savage Islands.

So some iron goods were introduced into the culture of the stone age Eskimos of this area but otherwise their life went on as it had for centuries—sealing winter and summer on the coasts, late summer caribou hunts inland, fishing in the occasional good rivers; sometimes plenty, often starvation. For shelter a tupek (skin tent) in summer, an igloo in winter. They were a people attuned to their harsh environment. Let the romanticists of today who deplore the new situation that has developed with our Euro-Canadian incursion into Baffin Island not forget that, though life was simple and white man's diseases not introduced, scarcity, death and sorrow were never far away from the primitive inhabitants.

From 1820 on the whaling fleets invaded the waters of Baffin and the old life began to change. When primitive self-sufficient man is touched by civilization ties break. Some of these ties were constricting and well loosed; others left the individual unanchored and adrift in a strange sea. But there is no turning back.

Before the nineteenth century the native population, still uninfluenced by white incursion, were living in scattered hunting communities along the entire southern and eastern coasts. Even so there was some nucleation, for always there have been localities from which hunting was better, or fishing rivers were available, where near-permanent native camps existed. Despite what some anthropologists have said, the trend towards collective village life has been as much present among the untutored Eskimo as among Europeans; the Eskimo is a very sociable person and likes to live in communities as large as the resource base will permit.

Cumberland Sound is an example of this, and when the nineteenth century whalers arrived on the scene their shore establishments tended to be at points where already there were congregations of native inhabitants. Today we have only one "town" in Cumberland Sound, Pangnirtung, sited at a quite different spot to the earlier settlements, but now the focus of the whole area, which has supported for centuries 500 to 600 people, and is now rapidly growing beyond that figure.

Baffin has experienced over the last century and a bit, some major changes in its way of life. Most of these changes have been of the boom and bust variety which have left its inhabitants uprooted and confused.

First came whaling which rose and fell, then white fox trapping which boomed in the 1920s and again during the second World War only to crash in the 30s and 50s. Then came the influx of white constructors, first building the wartime airports and then the DEW Line, now about to be abandoned. Other subtler and more lasting changes to the native way of life came from the advent of the missionaries, then white women, and now the schooling and other activities of the Canadian Government, dating from the end of the last war prior to which they had been almost negligible save for the activities of the R.C.M.P., which brought a fine and disinterested type of man into the region.

The first groups of white men to appear were the whalers from Old Scotland and New England, who established shore stations in Cumberland Gulf and (later) Pond Inlet and employed the Baffin Eskimos in their operations. They paid, not generously but reasonably, and in fact when they left and fur traders took over, the people, used to a subsistence wage, found it hard to understand the system of goods for furs received. No furs, no goods!

Next on the scene was the London Missionary Society. The missionaries, dedicated and helpful men, fiercely believing in their God and determined that all the world should share this belief, nevertheless accomplished much in the task of bringing our Baffin Island natives out of a slough of often ridiculously anti-social "taboo" behaviour, even though they introduced some others. Life is hard enough here without being told you should not travel or hunt on Sundays or dance any time. But these missionaries influenced Baffin kindly and sufficiently to make it all Protestant before the Catholic missionaries arrived on the scene. The latter are also dedicated men, patient men; biscuits at Christmas may result in one convert two years hence, and this is what counts.

The whalers had traded in skins of various kinds in a desultory way, but fur trading proper came to Baffin only after 1911 when the Hudson's Bay Company opened a

J. CANTLEY

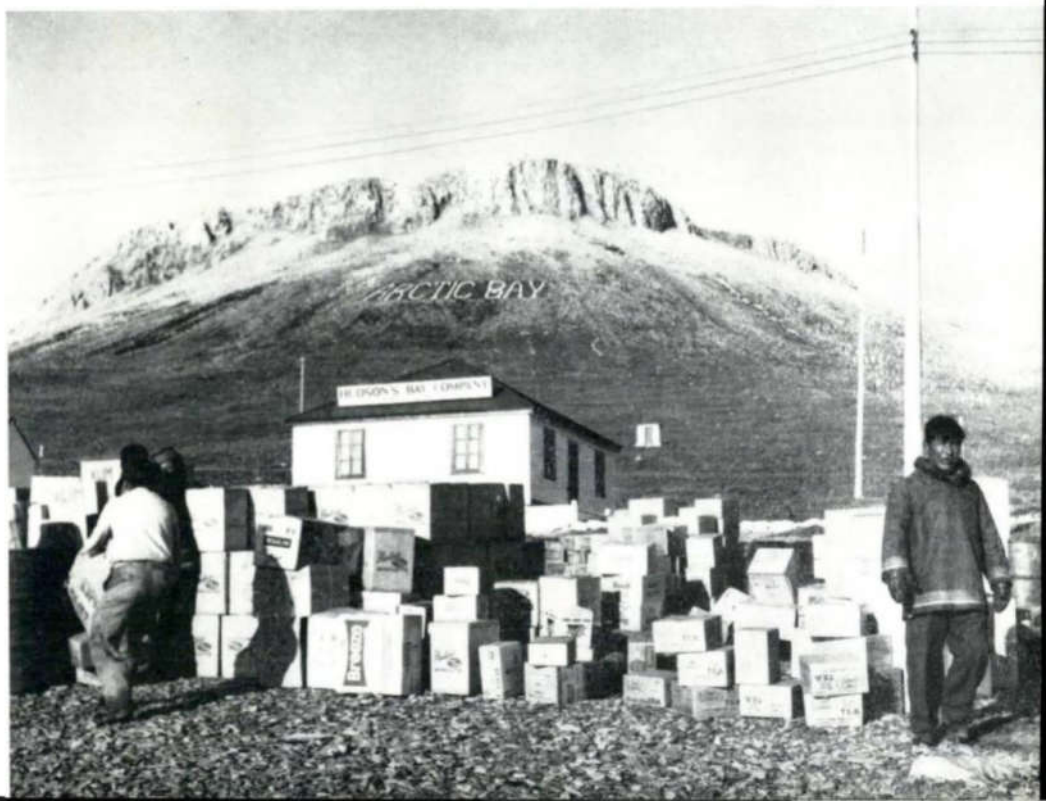
Clyde Hudson's Bay post c. 1936 with an Eskimo tupek (sealskin covered tent) on which arctic char are drying.

J. CANTLEY

FRED BRUEMMER

In 1926 the H B C built a fur trade post at Arctic Bay (above) which was then called Tukik and which was closed the following year. The post was re-established in 1936 and is shown, at right, as it is now after supplies from the annual ship have been landed. Above right, the manager of the present store examines a batch of ermine (weasel) skins brought for sale by an Eskimo.

FRED BRUEMMER



post at Lake Harbour and Captain Munn at Pond Inlet.

Until recent years the white fox, with its trapping season of November to March, was the main article of trade and this altered considerably the pattern of life in winter for the Eskimos. Fox numbers fluctuated considerably and so did prices—$50 in 1929, a $12 average in the three years prior to the second war, $35 again in 1942, $3.50 minimum in 1949-50. During the boom years of the '20s there was considerable competition for the trade. It was then that the Sabellum Company of London established "posts" on Baffin, usually at old whaling shacks with native traders and a highly irregular supply vessel. The last of these appeared in 1925 and in 1927 the only white man in their service, Hector Pitchforth, died alone in his ten by fifteen foot shack at Cape Kater.

Through the war the Baffin Trading Company established at Cape Dorset but after ten years of competition here, it too, folded, leaving the Hudson's Bay Company to face no competition until the newly-formed co-operatives began. And now the trade is in seals which have fortunately replaced in popularity the fox fur, and provide the Baffin hunter with a cash income *as well as* his essential food.

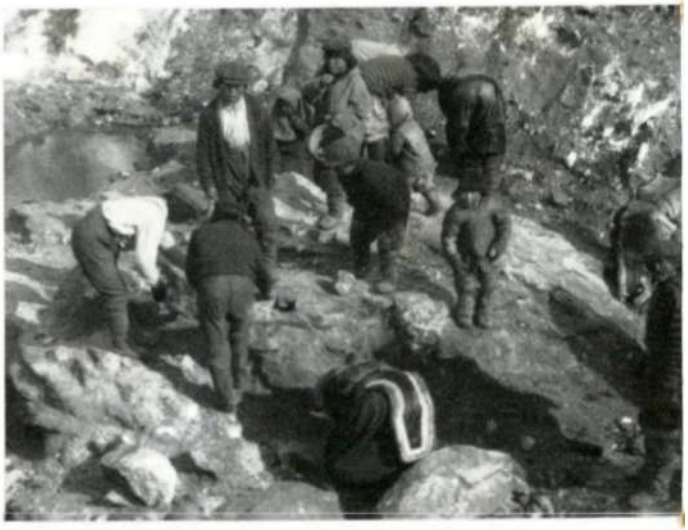
THE REGIONS

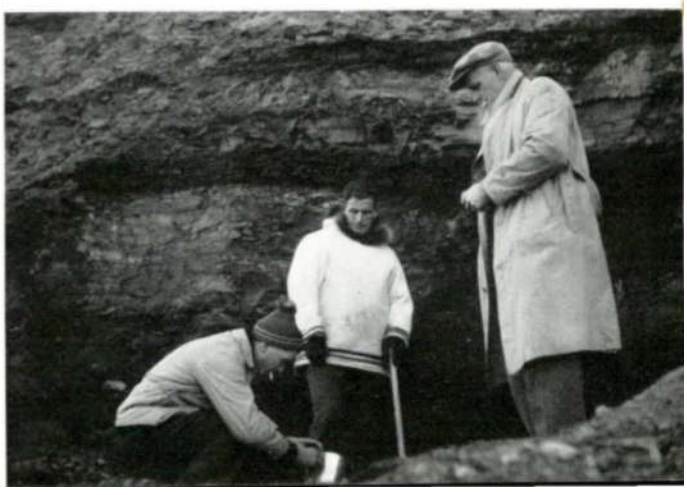
Let us finally examine the story of Baffin by detailing the settlements and conditions present and past in five groupings: the south shore; Cumberland Sound; Frobisher Bay; the Northeast Coast; Northwest Baffin. The western coast and central interior are virtually uninhabited except for the DEW Line posts of Dewar Lakes and Longstaff Bluff, and the summer population of Geographical Branch investigators.

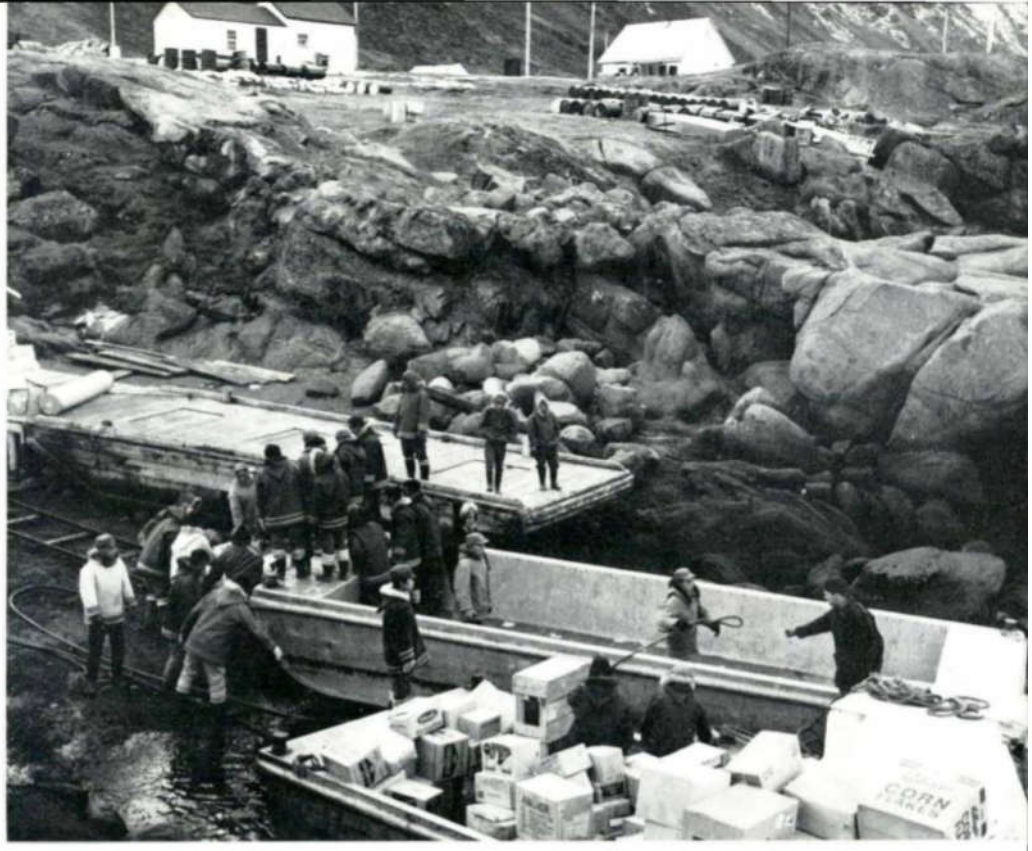
The South Shore

The oldest settlement here is Lake Harbour, where the Reverend A. L. Fleming, later Bishop of the Arctic, built a mission in 1909 and lived for five years, followed in 1911 by the H B C and in 1927 by the R.C.M.P. The first government school and nursing station for Baffin appeared in 1949. The district used to support a larger population, but it has been drained toward Frobisher Bay. A little mica was mined here between 1903 and 1913 by Captain Murray of the whaler *Active* and a boat building industry was started in 1953.

More vigorous today is Cape Dorset, where the old *Nascopie* sank in 1947 after supplying Baffin's posts for most of its 35-year life. The H B C has been here since 1913, but there was another store (Baffin Trading) for ten years, and now the West Baffin Eskimo Co-operative has opened a retail store. The Co-operative started at the instigation of J. A. Houston and his wife who stayed for several years organizing a flourishing handicraft business.







At Pangnirtung, Cumberland Sound, scows transfer the year's supplies from ship to shore where everyone turns in to unload. FRED BRUEMMER

Left, top to bottom: Sturdy boats are built at Lake Harbour.

Reindeer from Lapland landed on the shore ice at Amadjuak in the autumn of 1921.

In 1918 near Lake Harbour plumbago (graphite) was quarried by the Eskimos—a sporadic industry like the earlier mica mining. J. CANTLEY

Taking samples of coal at Pond Inlet in the thirties; at centre is Alex Stevenson, then with the H B C, now Administrator of the Arctic.

Between these two settlements at Amadjuak the Company had a post from 1921 to 1933. Here the *Nascopie* landed over 500 reindeer brought by the Company from Lapland. In charge of the project was Captain John Mikkelborg assisted by Storker Storkerson and some Lapp herders. The deer were landed late in the season, there proved to be insufficient forage for herded animals, and the experiment was a total failure. Of late years a great deal of prospecting of the nearby magnetite deposits has gone on but results have so far proved disappointing.

Off the eastern end of this Hudson Strait coastline is Resolution Island—site of a Department of Transport weather station since 1928. This fog-bound, lonely spot records the lowest July average temperature in all Canada and is depressing enough to have caused at least one cook to run amok, and hence be killed by his mates.

Cumberland Sound

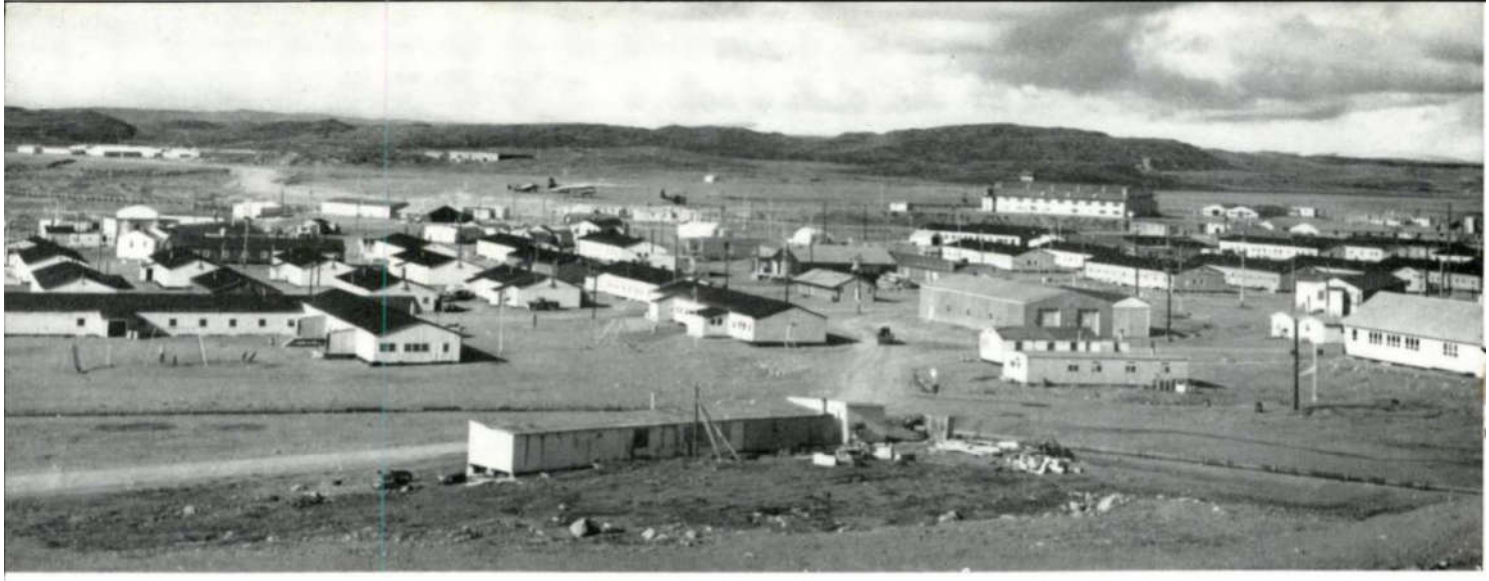
This region has perhaps seen the greatest economic activity, and the longest white contact with a native population which has had a good natural resource base. A maze of islands fringes the coasts of this huge bay and on two of them, Kekerten and Blacklead, long lasting shore establishments of the whalers were built, whaling having been a major occupation since 1850 or earlier.

Blacklead was the first mission establishment and from here over the last seventy years Christianity has spread to the whole island. When the H B C established in the Sound however, it was at Pangnirtung which is now the only permanent settlement of the region. Pangnirtung is a beautiful location, but has some drawbacks as the "capital" of the Sound. It lacks an efficient airfield, despite tentative efforts to establish one on the flat land where Lofty Stewart, who originally came to Baffin in 1913, built his golf course in the thirties. From roadstead to beach, Pangnirtung, with its 20 foot tide, suffers a lamentably rocky and difficult passage.

The Anglican mission moved here from Blacklead in 1926 and four years later completed St Luke's Hospital which, until the Second World War (and in part subsequently) has served all Baffin Island. At times doctors have been stationed here to serve the hospital, the most active one being Dr Livingstone. In the last few years the government has built a new village to the north of the older settlement, and established a school and dormitories.

Pangnirtung has had for many years a whaling industry but now it is with white whales (beluga). Every fall there is a big whale drive—the fat is rendered and barreled, meat goes for dog feed, muktuk (the outer skinlayer) is relished by the populace and the rest of the hides goes to the bootlace trade in Northampton, England! This trade was temporarily abandoned in the 1960s, but has been restarted by the government.

The mountainous region around Pangnirtung and up the pass beyond its fiord head have been an attraction to mountaineers since the author introduced them to it in 1953. Climbing parties have been there in 1961, 1963 and 1965 and the Anglican missionary (1961-64) the Reverend S. Wilkinson did some fine solo climbs as well. Flanking



Part of Frobisher Bay as it is today with new houses and stores, such as the one at Apex, shown at right.

the pass just about on the Arctic Circle are Mts Odin and Thor, the former just over 7,000 feet, and west of Summit Lake is the even more spectacular Mt Asgard, a huge rock pillar with a tiny snowcap.

Frobisher Bay

This is a depressing area to describe. It is now, thanks to its wartime airfield and subsequent accession of the Department of Northern Affairs' (now Dept. of Indian Affairs and Northern Development) rehabilitation centre and Eastern Arctic Headquarters, the "capital" of Baffin Land. But a most unsuitable one.

At the head of a very difficultly navigable bay, it is away from any major hunting resource base except for a good arctic char river. But there was flat enough ground for a major airfield, hence Frobisher, built in 1941-42 as one of the "Crystal" bases. Then in the DEW Line crash construction it was the local base of all the transportation business for Baffin Island's eastern flank of the system.

Now we have three widely dispersed sections of the "town". First the airfield with the vast Federal Building (ex U.S. Air Force, who left in 1963) and a mixed batch of steel prefabricated buildings. Second, Ikaluit, the native suburb, one tenth of which has decent prideful buildings, nine tenths is our major arctic slum. Third, Apex, the rehabilitation centre with good houses in the main, but a creeping slum is developing here too. Here is the new Hudson's Bay store (which also has a branch at the airfield area).

I have hopes of Frobisher. At present it is a rather sorry mess, but in twenty years time something fine may come of it. It will, I hope, pull itself up by its sealskin bootstraps. In 1964 a fine modern 28-bed hospital was built which can serve all Baffin. One of the residents, Simonee, was elected in 1966 to the Northwest Territories Council, the first elected Eskimo councillor and second Eskimo serving on the Council. There is a C.B.C. regional

station here, broadcasting in English and Eskimo. The local co-operative has not had much success so far with fish but has flourished and should continue to flourish with other activities. The trade school is another hopeful development, but Frobisher today has too many people. Perhaps it will steady down to a modern job-economy area where the local employees are 90 per cent Eskimos and the Euro-Canadians minimal.

The Northeast Coast

This is the fiord coast: innumerable long deep inlets flanked by great and often ice-hung mountains, and a multitude of offshore islands. Down this coast, out from the winter ledge of landfast ice, sweeps the Baffin current at twelve to fifteen miles a day, carrying icebergs, most of which started their voyage from Greenland, and polar bears.

Many of the inlets were first investigated by whalers, each captain having his favourite anchorage for shelter, watering ship, hunting and occasional trade with the scattered Eskimo population of this coast. Various transient settlements appeared; at Padle, a small house built by whalers was occupied by Mr Duval, a long time Baffin resident, in 1910; later the Sabellum Company took it over together with Kivitoo where the unfortunate

FRED BRUEMMER

Pond, too, has up-to-date buildings but the outlook is to mountainous Bylot Island in far north Baffin.

Hector Pitchforth arrived in 1920. Today these posts have been superseded by Padloping, built during the second war as a weather station for the Crystal route and Broughton Island, a DEW Line airbase where the H B C established a general store in 1960. And at the extreme eastern end of the DEW Line, Cape Dyer station looks out over Davis Strait, as does Cape Hooper over Home Bay.

Further north Clyde post was established in 1923 and has since remained in continuous operation, supplemented during the war by a weather and an ionosphere research station, and by a school opened in 1960. Now a major U.S. Loran station at nearby Cape Christian, has a year round serviceable airfield with ten aircraft a year and is the location also of the R.C.M.P. detachment.

Clyde was the base of the Arctic Institute expedition of 1950 which first investigated the Barnes Ice Cap inland from here, and at the head of neighbouring Inugsuin Fiord the Geographical Branch, which has recently continued investigations on and around the Ice Cap, has built a small base facility.

Far North Baffiin

North of Clyde (latitude 70) one reaches "The Land of the Long Day" (as it was described by Doug Wilkinson who spent a year with its people in 1950-51). Also a long period of winter dark so that the 500 or so people who live here have to adjust to a partially different way of life.

Pond Inlet, with its wonderful view across 15 miles of water to the 6,000-foot mountains of Bylot Island, was an old time whaling stopover with stations at Button Point and Albert Harbour (east of the narrows). At Button Point Captain Henry Toke Munn established a trading post in 1912, the gold rush year when Janes of Bernier's *Arctic* expedition wrongly reported gold. The Hudson's Bay Company took over from Munn in 1923 and its first manager was Gaston Herodier, after whom the mountain on the Baffin shore overlooking the narrows is named. (He died later in a fire in the Western Arctic).

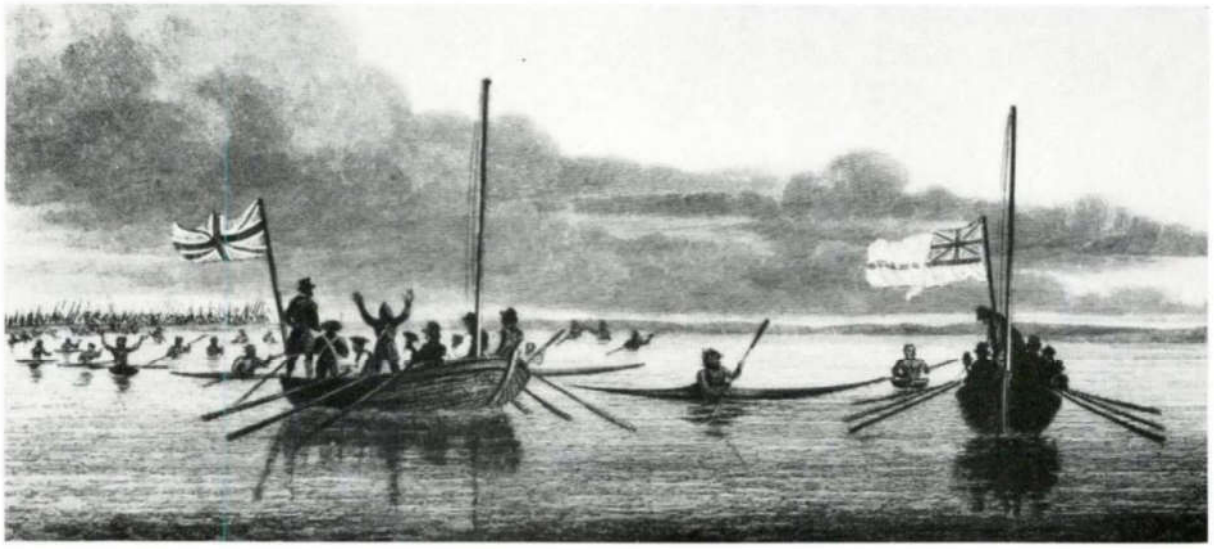
Then came the R.C.M.P. and in 1926 both Protestant and Catholic missions set up side by side. These two and the Company have been utilizing the seam of coal a few miles west of the settlement for local heating, doing their mining for a few weeks in April. Pond Inlet is *the* place for narwhal and this animal plays an important part in the native hunting life, in which the kayak is still occasionally used.

The other settlement in this region is Arctic Bay, the landlocked harbour used by Captain Bernier in his 1910-11 wintering. The Company built here in 1926 but were requested to close next year by a not very wise government decree. However the post reopened in 1936 and now is supplemented by a weather station and school.

Farther down Admiralty Inlet, one of the world's greatest fiords, Canon Jack Turner set up a mission at Moffet Inlet after coming to the territory in 1929. He was one of the best northern travellers, covering his huge parish by dog-team and boat, but he died in the fall of 1947 from a rifle accident.

A good deal of prospecting has gone on around Arctic Bay without as yet any economic discovery. Further east however, 60 miles in from Milne Inlet, an exceptionally rich iron ore deposit was found in 1962 on the west flank of the Precambrian uplands. At least 130 million tons of 68 per cent ore has been proved and an airstrip constructed. The shipping season from Milne Inlet is woefully short—an icebreaker is trying to establish its duration in 1966, but with such excellent ore it seems that we have an economically possible mine which could alter the pattern of life in Northernmost Baffin for a generation to come.

The people of Baffin Island can no longer live by hunting and the fur trade alone. Only by a large proportion of its inhabitants changing to a job-economy can the Eskimo prosper. Let us hope that the transition, already well under way, will continue purposefully and happily. ◆



Franklin's party greeted by Eskimos off the mouth of the Mackenzie in July 1826, sketched by Captain Back.

A NEW CRAFT on the Mackenzie Delta

BY A. M. PENNIE

THE BRITISH, particularly the British servicemen, have a great flair and natural ability to survive and succeed in the remotest areas of the world under extreme environmental conditions. There have been many notable instances throughout the centuries; in particular, Sir John Franklin has left his name in the pages of both British and Canadian history books. Almost any child in grade five in a Canadian school will describe vividly Sir John's first overland journey down the Coppermine River, along the Arctic shore and back to Fort Enterprise, over the Barrens. The privations of Franklin and his party were extreme to say the least, yet he returned with some of the survivors of that epic journey some three years later to continue his voyages and explorations in that bare, barren, inhospitable part of Canada that even today is treated with caution and reserve.

Although their methods of navigation were solely astronomical and not too much different from today, they were travelling through unmapped country and in effect had to make their own maps while on the move. Since determination of longitude was difficult these maps or sketches of the ground traversed were often inaccurate; however it is still possible to trace the progress of the party down the Mackenzie and eastward along the Arctic coastline. For them there were no radar beacons, or maps to check their progress and no Dew Line stations to provide accommodation and comfort.

Those who know this part of the country realize that in summer, fall or winter, it is no place for the tyro or the amateur, and travel is a slow, tedious business if pursued on the surface as opposed to air. The rivers are uncertain and hazardous, and overland the muskeg, the lakes, the flies and the barrens all tend to make travel difficult and exhausting.

The Franklin party saw the Arctic in all its difficult shapes and moods. They braved the hazards and dangers of the wide, winding Mackenzie River, threaded their way through the maze of water courses in the delta and explored with detail and accuracy the uncharted Arctic coastline. Like all British service teams, they had a purpose in mind. They were imbued with a spirit of strong discipline and a determination to execute exactly the orders and instructions issued to them by the Lords Commissioners of the Admiralty. So strongly were they infected by this drive and initiative that they survived the most severe hazards of travel and privation which weeded out and destroyed those who lacked this motivation.

One hundred and forty years have passed since gallant Captain Franklin and his naval-scientific team struggled over the mixed terrain of the Mackenzie Delta and the Arctic coast. Since that date man has tried a variety of means of locomotion in that part of the country including the recent use of motor-toboggans and, apart from air

Mr Pennie is Deputy Chairman of the Defence Research Board.

travel, he still makes his way over the land by difficult, slow, tedious and uncertain means. In other words, little has been achieved in solving the problem of overland travel in the Arctic and certain areas in the sub-Arctic.

Quite recently the air cushion vehicle, or hovercraft, has been adapted to use in certain areas of the world and is showing promise as a good and all round means of transportation on rivers and in coastal areas. There are now limited water ferry services in Britain, in Scandinavia, and in San Francisco Bay. In addition, it is being used in a military role in the Far East.

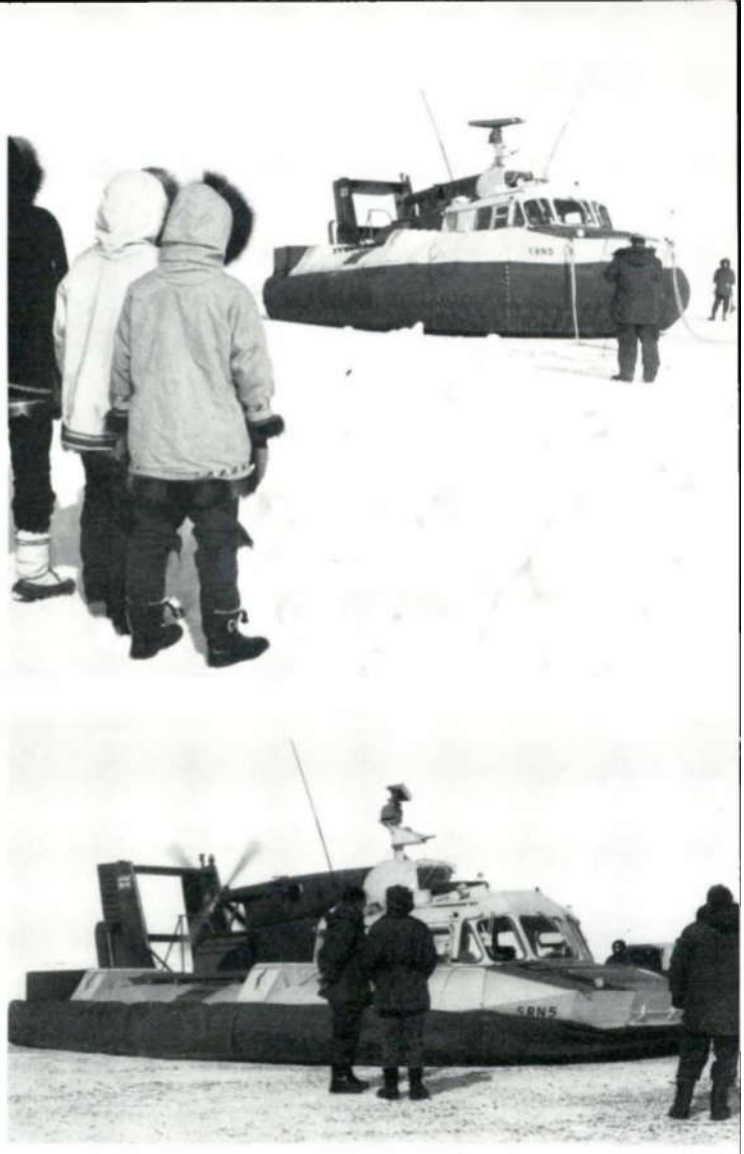
The adaptability of the hovercraft to conditions in various parts of the world led to a joint British-Canadian evaluation of this type of machine in the Canadian Arctic, a region in which the vehicle had so far not been tested. The particular area selected was in the Mackenzie Delta district where a variety of terrain conditions were likely to be encountered—the sort of conditions that impose particularly severe restrictions on surface travel in late winter and during the break-up.

Through the co-operation of the Ministry of Aviation, a Westland SRN5, with crew and support personnel, was loaned to the Canadian Government in 1966 for a period of two months. The evaluation was requested by the Advisory Committee on Northern Development. The Defence Research Board undertook, with assistance from several other departments of government, to plan, execute and report on the trials.

The machine was broken down in England and flown directly by Hercules aircraft of the RCAF to Tuktoyaktuk at the mouth of the Mackenzie River on the Arctic Ocean. After re-assembly its performance over a mixture of terrain was evaluated.

The test team was a good all round mixture of Canadian and British servicemen and scientists. Traditionally, the link with Franklin was maintained, for elements from the Royal Navy were among the British representatives. Despite their nationality or service-civilian allegiances, the team worked as one happy unit and displayed the same resourcefulness and determination as characterized Captain Franklin's expedition to that very part of the Arctic coast in 1826.

A visitor to the test site at Tuktoyaktuk could not help but recall the scene and events of 140 years ago when Doctor Richardson (the scientist of the party) led his crew over the very beaches and bays that were now the testing ground for the hovercraft. Richardson and his men spent several days finding their way from the Mackenzie Delta round the rough and rugged coastline. They man-handled their heavy boats through storms and inclement weather, snatching fitful spells of sleep on the mud flats close to the present settlement of Tuktoyaktuk.



Local inhabitants were just as curious about the hovercraft as they were about Franklin's sea-going boats. SRN5 which is nearly 40' long and 23' wide is shown with skirt inflated in hover position and, below, at rest with skirt deflated.

It took them literally days to accomplish journeys that the hovercraft performed in hours.

In 1966 some things had not changed. The terrain and the climate presented the same obstacles and challenges to the hovercraft team and brought the best out of them, just as it did in the expedition of 1826. Both teams were really engaged in the same type of exercise—pitting themselves and their equipment against the environment. Each had their setbacks but eventually completed their respective military-scientific missions successfully.

Time and progress, however, had made things a great deal easier and more comfortable for the present expedition. They had the great advantage and the benefits of very highgrade logistic and air support and excellent accommodation afforded by the defence installations in

The hovercraft making a fair rate of knots over the sea ice near Tuktoyaktuk. PHOTOS BY C. R. YOOL, D.R.B.

that area. At the conclusion of their work day their observations and findings could be recorded and studied in the comfort of warm quarters and not in a cold make-shift wind-break under a boat on the beach.

The remoteness and isolation of the Arctic somewhat lost its significance to many of the British visitors when they found that they could telephone their families in England as easily as they could from a London suburb!

Basically the hovercraft is a boat structure with a flat bottom but suspended from the underside is a rather bulky, flexible, rubber fabric skirt. When the machine is at rest the bottom of the 'boat' sits on the ground, when it goes into the hover mode low pressure air is pumped down into the skirt which expands somewhat like a plastic doughnut and inflates to a height of about 3½ feet, the vehicle rising to the full height of the inflated skirt. Since the skirt is open at the bottom there is a slight spillage of air around the edge and, in effect, our 'boat' rides on a cushion of air just above the ground. As it moves forward it rises so that the skirt is about 3 inches clear of the ground. When it reaches a protuberance the skirt brushes over this obstacle. The SRN5 used on the trial had a normal passenger capacity of 15; it could carry 3,500 pounds of freight or individuals for 3.8 hours endurance. A load might therefore consist of a crew of two, payload 3,500 lb., and 1,700 lb. of fuel.

The Tuktoyaktuk area provided a variety of terrain for evaluating the performance of the machine. There, one encountered good and bad sea ice with pressure ridges, long sloping beaches, rolling tundra with frozen lakes, often surrounded by bushy willow trees which provided an impediment for the majority of ground travel means.

The hovercraft literally took all these obstacles in its stride and demonstrated dramatically and clearly that it was at home in this mixed environment. It brushed over the sea ice at speeds of 60 knots and weaved its way over the tundra and lakes at speeds of 40 to 50 knots—speeds which were at least five to seven times greater than the most satisfactory dog-team or over-snow or land vehicle.

During break-up it travelled up the Mackenzie River from Inuvik to Norman Wells. On this journey it averaged 35 knots over the rough and tumbling break-up ice and was equally at home over the open water or water and break-up ice. Since, however, it had a limited obstacle clearance of some five feet, it was forced to retire temporarily to the safety of a creek when it encountered an unusually heavy and dangerous barrier of rafted ice moving very rapidly through the first fast water (the Sans Sault rapids) on the Mackenzie north of Norman Wells. Apart from this the machine accomplished every task and challenge presented to it in that part of the country. It is true to say that its performance exceeded the hopes of those who planned and organized the trials.

There is every hope that as a result of this evaluation a role for hovercraft as a year-round means of transport may be identified and confirmed in the Arctic or perhaps in other maritime and coastal areas of Canada. ◆

THE CALL OF THE ARCTIC

BY WILLIAM M. ROBINSON

THOSE IN MY AGE GROUP will remember the depression of the thirties. Vividly they will remember how long it lasted. I was fortunate. For me the depression ended in 1938. That year the Hudson's Bay Company afforded me the opportunity to travel into the Arctic and sub-Arctic to trade for fur with the Indians and Eskimos.

By various high schools between Halifax and Vancouver, five hundred volunteers were recommended to fill sixteen vacancies. The chosen few were sent to a training school in Winnipeg and trained in the arts of fur grading, carpentry, bookkeeping, short-wave radio, and merchandising. Two nights a week we attended cooking school at the Daniel MacIntyre Collegiate; not because survival preparation for a trip into the wilderness, where fish are pulled from a stream and cooked over an open camp fire, should consist of some training in operating an electric range, but because preparation for surviving one's own cooking should consist of some train. ~ in how to cook.

Eleven of the sixteen completed the training school and were posted to locations in the frozen north. I was posted to York Factory.

To get to York factory from Winnipeg it was necessary to travel by train as far as The Pas. Then from The Pas to Gillam travel was on the Hudson Bay Railway in some extremely distant relative of a train. The remaining one hundred and twenty miles from Gillam was travelled by dog-team.

When I arrived at Gillam I found that it would be a week before a team arrived from York. In those days the dog-teams kept to a more rigid schedule than did the railway. In exactly one week the team arrived. I was given a tin mug, a tin plate, a knife, fork and spoon, a pair of snowshoes and a couple of words of encouragement from the Gillam post manager. Then I was on my way with two fellows of mixed French and Cree blood as travelling companions, guides and trail bosses.

We followed the roadbed of the Hudson Bay Railway. Originally the railway had been planned to connect the prairies with Port Nelson at the mouth of the Nelson River. After the roadbed had been completed and a huge bridge-like structure, extending half a mile into Hudson Bay had been erected at Port Nelson, the Government took a second look and changed its mind. Gillam is where they took the second look. Twenty miles east of Gillam is where they changed their mind and turned north towards Churchill.

Ten miles from Gillam we stopped for lunch. My companions built a fire, made tea, and heated a mess of bacon and beans in a frying pan. If the frying pan had ever been introduced to soap and water it must have been an extremely fast hello. When lunch was cooked I was given my portion on my tin plate. The mushers placed the frying pan between them and passed their only piece of cutlery, a butcher knife, back and forth. And each helped himself to a knifeful of beans. The setting and the table manners may not have reached banquet standards but I can't recall ever having enjoyed food more.

A whisky jack (Canada Jay) flew into a nearby pine and started to scold us at great length. I picked up a rifle and began to take aim; but was immediately advised to save my ammunition until an edible target presented itself. My guides explained that although Indians did eat whisky jacks when they were properly cooked, on the trail time did not permit cooking them properly. A whisky jack is cooked by boiling. A stone is placed in the water with the bird. When the stone is soft enough to cut with a knife the whisky jack is ready to eat.

I had learnt about dog-team travel by watching movies. Unfortunately the drivers and dogs I was travelling with had not seen any movies. Instead of riding a sled and skimming over the frozen snow at something like thirty miles an hour we took turns breaking trail and made all of two miles an hour when the going was good. Breaking trail consisted of flattening out a wide pathway for the toboggan. Snowshoes are reported to give an additional spring to one's step. You can't prove it by me. I only spent one winter in the snowshoe country. That wasn't enough time for me to graduate from the primary class of snowshoe walking. This may be partly due to the law that states that the time required to learn is directly proportional to the learner's interest.

It took seven days to travel the one hundred and twenty miles. When we arrived I took off my snowshoes, my moccasins, and my four pairs of outer socks. Then I

After leaving the Arctic in 1941 Mr Robinson served in the RCAF then settled in Vancouver where he works for the B.C. Electric.

took off my inner socks and half the soles of my feet came with them.

York Factory teems with history. It changed hands seven times while the French and English were arguing over who was to control Canada. Finally the French won and sailed away leaving the English to battle the mosquitoes and fight for a firm footing in the muskeg.

I was at York Factory for a year. Then I was posted to Churchill. Churchill was the metropolis of the north. There were seven white women and one hundred and twenty men. Due to a slight misunderstanding between the post manager, the district manager, and myself over a leaking radiator in a company truck, my stay at Churchill ended rather abruptly after four months. I suddenly found myself on the *Nascopie*, headed north for Chesterfield Inlet, where it was to rendezvous with the *Fort Severn*, on which I was to journey still farther north to Repulse Bay.

Between Churchill and Chesterfield Inlet I contracted a severe head cold. It was one of those really miserable types where your head aches, your throat is sore and your nose brimmeth over. However, I was told at Chesterfield that it was just as easy to be miserable at Repulse as anywhere, so I was loaded aboard the *Fort Severn*, head cold and all. Two miles out of Chesterfield Inlet I got rid of my head cold. I traded it for a case of seasickness. And I got the worst of the trade.

Repulse Bay is a desolate spot. I was there for a year. I spent the first two hours looking the place over and the rest of the time praying that the supply ship would be able to make it in again the next summer to take me out.

Two days after I had arrived at Repulse a flock of two to three hundred ptarmigan, on their way south for the winter, landed about a hundred yards from the house. Tom Crawford, with whom I was to spend the winter, located a couple of pack sacks while I broke open a case of 22 calibre ammunition. Armed with two 22 rifles and plenty of shells we set out to shoot ptarmigan. Our first shot netted one bird and frightened the flock into flying about three hundred yards. We followed and shot again. This time we got two birds before the flock flew another hundred or so yards. We walked to within shooting range, sat down and shot in the neighborhood of seventy birds before they realized something was not quite right. Once they had arrived at this decision they flew until they were out of sight. Even a bird brained ptarmigan knows better than to spend the winter in the Repulse Bay area.

We carried our game home and spread them on the deck of an abandoned ship. It was late August. Nature's deep freeze was already in operation. They were safe. The dogs couldn't reach them and the Eskimos never steal.

Ptarmigan are small game birds so more meat was required for our winter's supply. It was necessary for one of us to go deer hunting. I was the junior member of the two-man staff. I volunteered. Soon two Eskimos and twenty husky dogs were travelling over the arctic waste looking for caribou. And I was along for the ride. It was early October, the mild part of the winter, consequently the Eskimos did not consider it necessary to build a full igloo. They merely made walls of snow blocks and fastened a tent over them to form a roof. During the night the wind blew the roof off our shelter. The Eskimos sprang out of their sleeping bags, chased and caught the tent, brought it back and fastened it in place. Still wearing all my clothes, with the exception of my outer parka, I watched the proceedings from the protection of my sleeping bag. I was cold and I could see nothing pleasant in the situation. The Eskimos were laughing; they were sweating; and they were stark naked except for their kamiks (skin boots). Laughter seemed to be the only expression of emotion the Eskimos used. I remember one chap telling how his brother had fallen through a hole in the salt sea ice and consequently drowned. And he laughed continually as he talked.

In the morning there was not a dog to be found. The twenty to thirty mile an hour wind had drifted the snow till they were completely buried. The Eskimos jabbed a three foot length of steel rod into any likely looking mound of snow. They were soon rewarded with a few yelps and the twenty dogs emerged.

The next night the boys decided that a full igloo would allow a full night's rest. Again the length of steel was used. This time to test the snow. In order to build a decent igloo the snow must be firmly packed or frozen to a depth of at least three feet. When a suitable pocket of snow had been found the Eskimo extended his arms. He used one hand as a pivot, the other as a marker and drew a circle on the snow's surface. Then he took his snow knife —a butcher knife with an overdeveloped business end— and began to cut snow blocks from the confines of the circle. These blocks were then placed so that they formed a wall around the outer edge. The next series of blocks were cut from the circumference of the now smaller circle. When these blocks were placed on the wall their smaller curvature gave them a natural tendency to tilt inward. The process was continued until one circular block about a foot in diameter remained. This was placed to one side for use later as a key block.

The floor area was then equally divided. The blocks required to complete the walls and roof were cut from one half. The other half was left as a sleeping bench. Finally the key block was fitted into place in the centre of the roof. The Eskimo cut his way out and made certain

that the block he cut in so doing could be used as a door. The house was completed. I was informed that this had been a hurried construction job. It had taken fifty-five minutes. Usually a couple of hours was spent in building a house.

While the Eskimos fed the dogs and did the other necessary camp chores I crawled into the igloo and lit the primus stove. I made tea. I fried bannock. For the first time in seventy-two hours I was beginning to feel comfortable. The stories I had read as a boy were right. Igloos were warm. Then one of the Eskimos entered and became quite excited. I had managed to heat the igloo above freezing point and it was melting.

The caribou were scarce that year. We had left the post with a two-week supply of food. After three weeks there was very little of it left. And it was another two weeks before we shot a deer. However since all the lakes and streams abounded with fish there was no need for us to go hungry. I haven't tried lately, but I believe I have now reached the point where I could again eat fish.

The arctic winters are long and if they are spent doing nothing but eating and sleeping they seem even longer. In order to shorten the winter, and make a few dollars doing it, we decided to run a trap line. I was given a ten minute lecture on how to trap the white fox.

The white fox is a curious animal. He investigates any unusual object he notices. Whenever a trap is set it is common practice to build a snow monument to attract his attention. Since the traps are usually set in an easily noticed location these monuments serve the dual role of also providing a marker for the next trip of the trapper round his line. If the trap was set in the open the drifting snow would hamper or even prevent its action. To avoid this, a hole just large enough to house the trap and bait is scooped out of the snow. A block is then cut for a lid and placed over the hole. Then this lid is shaved to a thinness through which the outline of the trap is clearly visible.

I made the first trip, with the same two Eskimos who had taken me deer hunting. A dog that had turned out to be a poor sled dog followed us. Before we were out of sight of the first set he had managed to spring the trap and eat the bait. I shot the dog and used him for bait, when I reset the trap. There is no room for parasites or pets in the Arctic. Anyway he must have smelt good to the foxes. We caught three there.

In the early spring, approximately the first two weeks of July, the sea ice cracked and drifted out into the bay. It was then seal hunting time. Seals could only be hunted when the water was perfectly calm. We would frequently rise at two or three a.m. to take advantage of the still sea. A seal is attracted by any unusual sound and we used to create an unusual sound by scraping the butts of our rifles on the bottom of the canoe. The seal would bob up to look, then come closer and look again. If he bobbed up about ten feet from the boat he was a suitable target. After a seal had been shot it would float for approximately one minute. During this minute it was necessary to start the motor and manoeuvre the boat close enough to allow the Eskimo harpoonist to jab the seal with a harpoon.

The dead seals were piled on the shore and covered with rocks. Protection against animals was the only protection necessary. The summers were short and cool. The seals would still be good when they were required for food the next winter. They would make food for both man and dog.

Hen eggs were unknown and breakfasts often consisted of ham and eggs without the eggs. But in the spring we had a change of diet. Nesting gulls were plentiful. Long before the ice had broken the gulls were nesting on cliffs that overhung the shoreline. When the adult gull considers her young big enough to leave the nest she pushes him out. If he can't fly, he will flutter the two hundred or so feet down to the water, where he can always float. I was lowered over the cliff to collect eggs, not because I was the junior member of the staff, but because I was twenty pounds lighter and fifteen years younger than the other member.

In mid August the supply ship arrived. I began praying harder than ever. The wind had changed and ice had followed the ship into the bay. For a full week it was doubtful whether or not the boat would be able to leave but finally the wind changed again and no time was lost in setting sail for the southern seas at the mouth of the Churchill river.

When we arrived at Chesterfield Inlet I picked up my cold again. It was waiting for me with all its miseries. Even a cold germ draws the line somewhere around the 63rd parallel.

There were two crew members from Churchill on the boat. One of these chaps was much annoyed at the delay he had had at Repulse Bay.

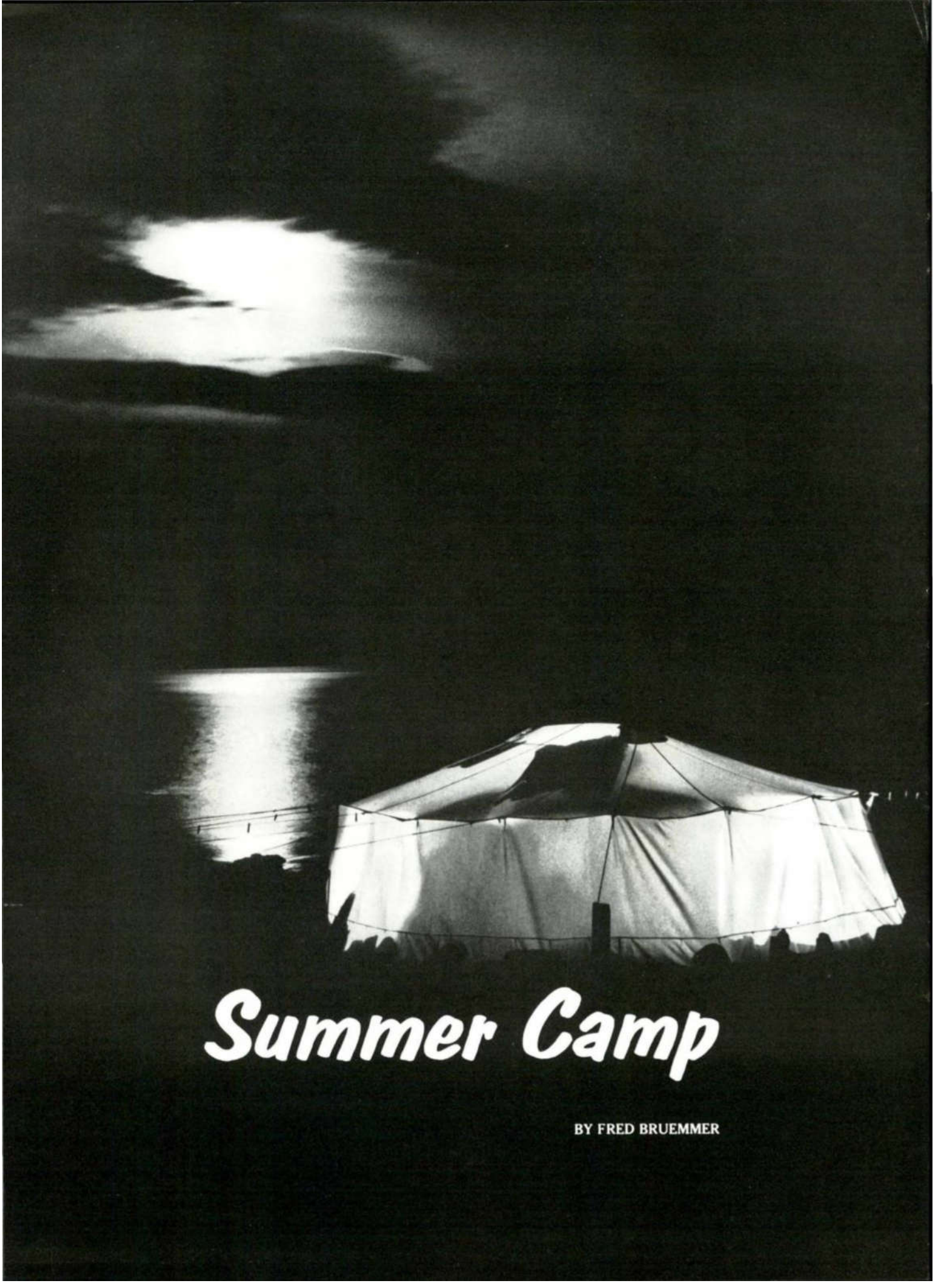
"What's your rush?" asked the other.

"I want to build a house," came the reply.

"So what? You'll have two weeks before the snow comes, after we get home."

"Ah yes," he said, "But I want to build a good house. I want to take at least a week to build it."

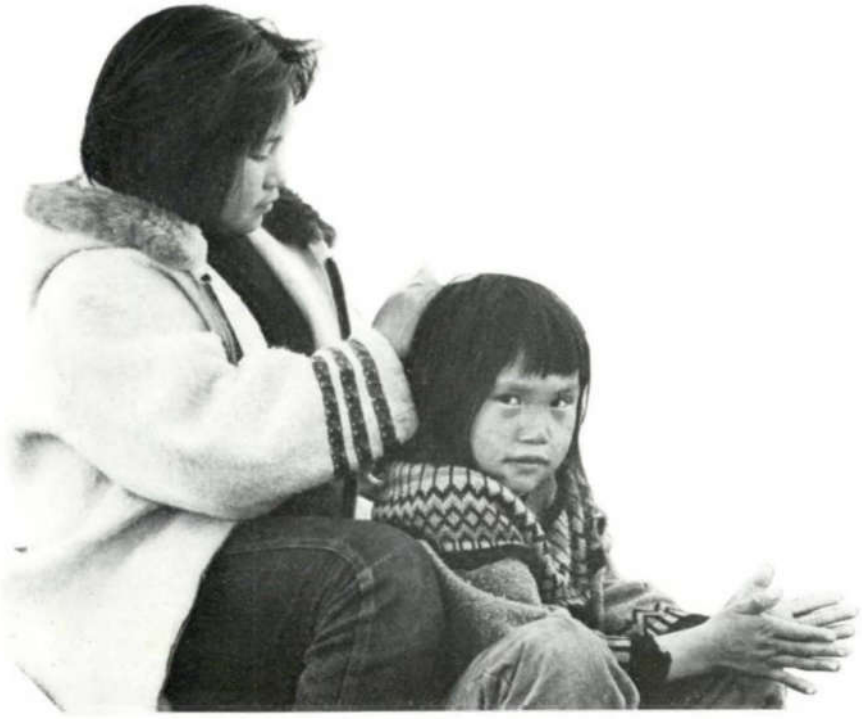
By the time we arrived at Churchill, I also was impatient to go home. I didn't want to build a house but it was now two years since an Austrian paper hanger had ended the depression, by starting a war, and I wanted to see how the "outside" looked when anyone who wanted a job could get one. ◆



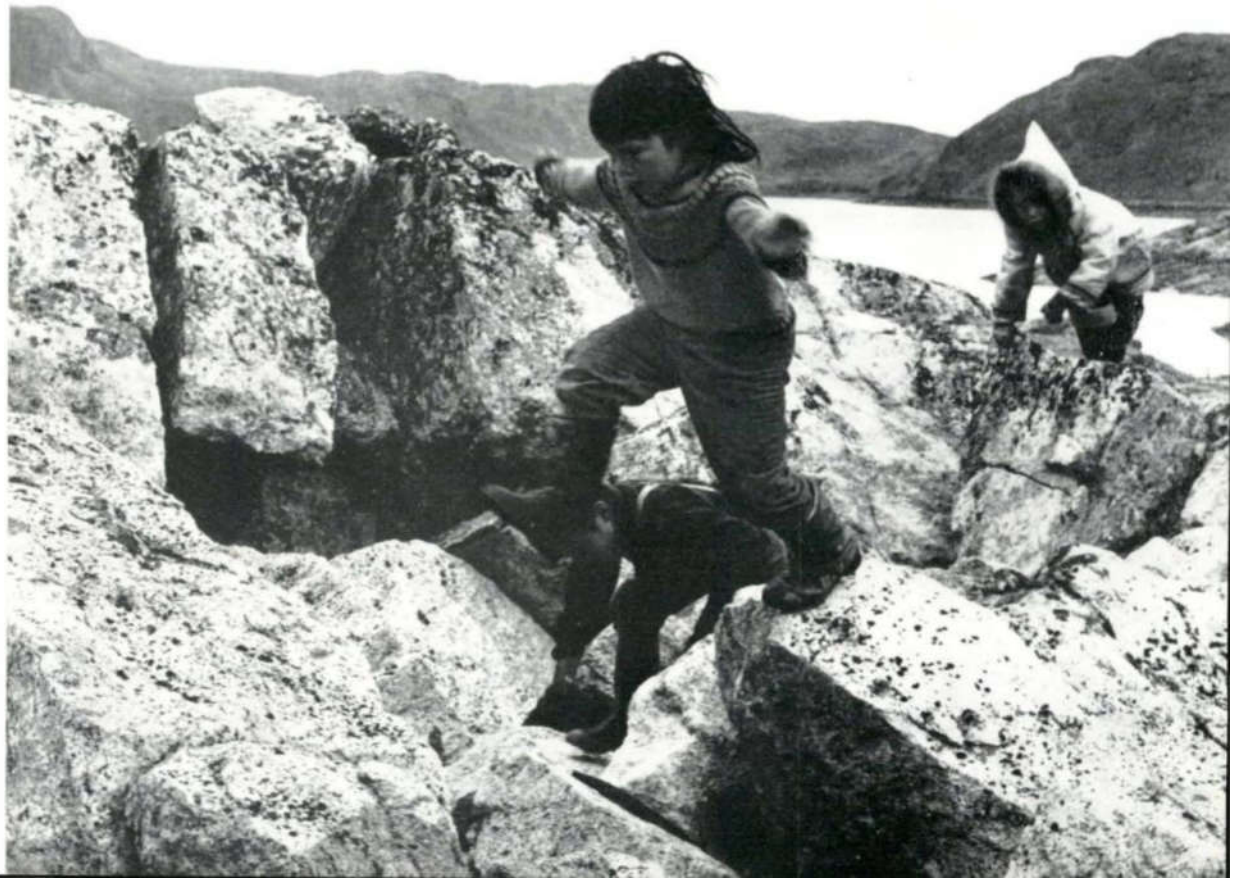
Summer Camp

BY FRED BRUEMMER

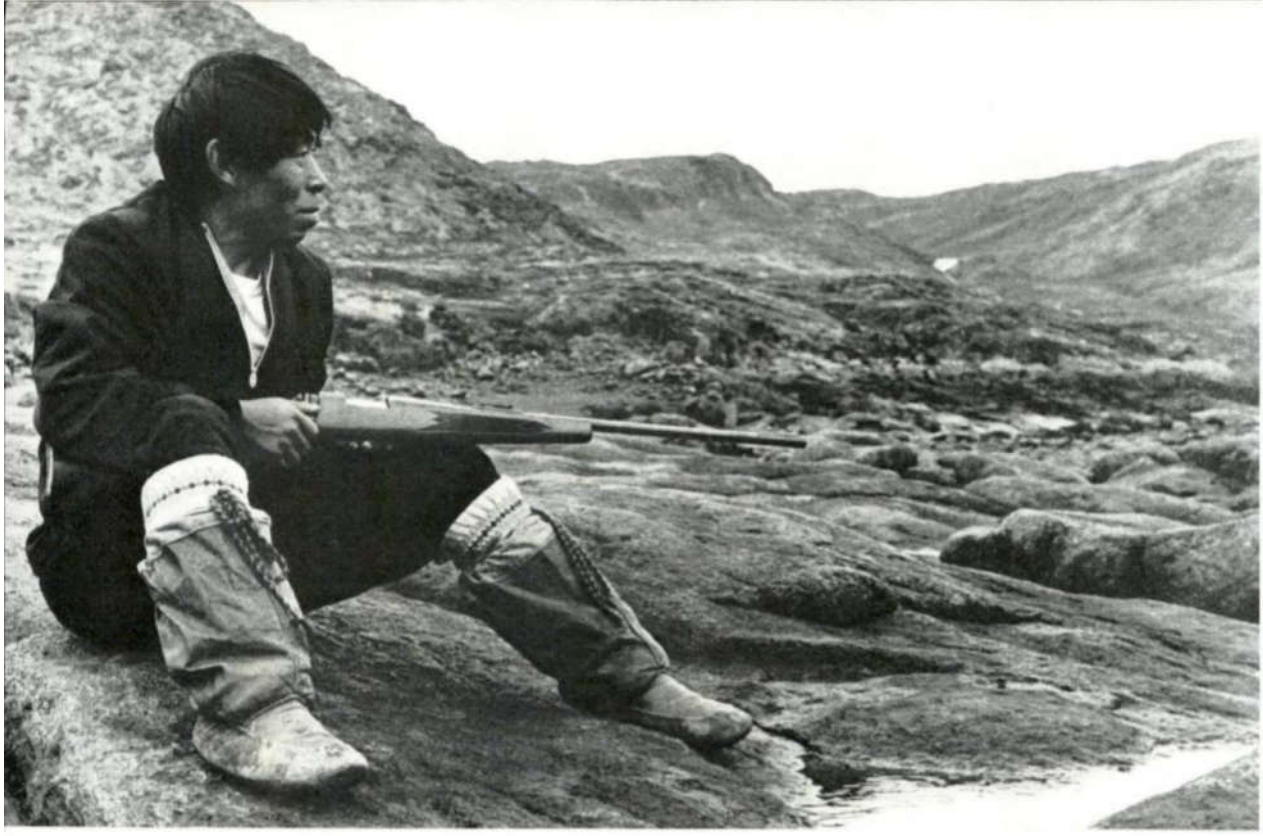
Etuguloopia is an Eskimo hunter from Frobisher Bay, Baffin Island. He has a house there but spends little time in it. His real home is a camp somewhere down the great bay, wherever hunting is good, a tent in summer, a permanent plywood and canvas shelter in winter, and an igloo when he is travelling in winter and spring. A few months each year are spent at the mountain-sheltered Cormack Bay off Ward Inlet, where the Hudson's Bay Company post stood from 1921 to 1949, before the present Frobisher Bay site was established. The middle tent in the Cormack Bay camp is where Etuguloopia and his family live.

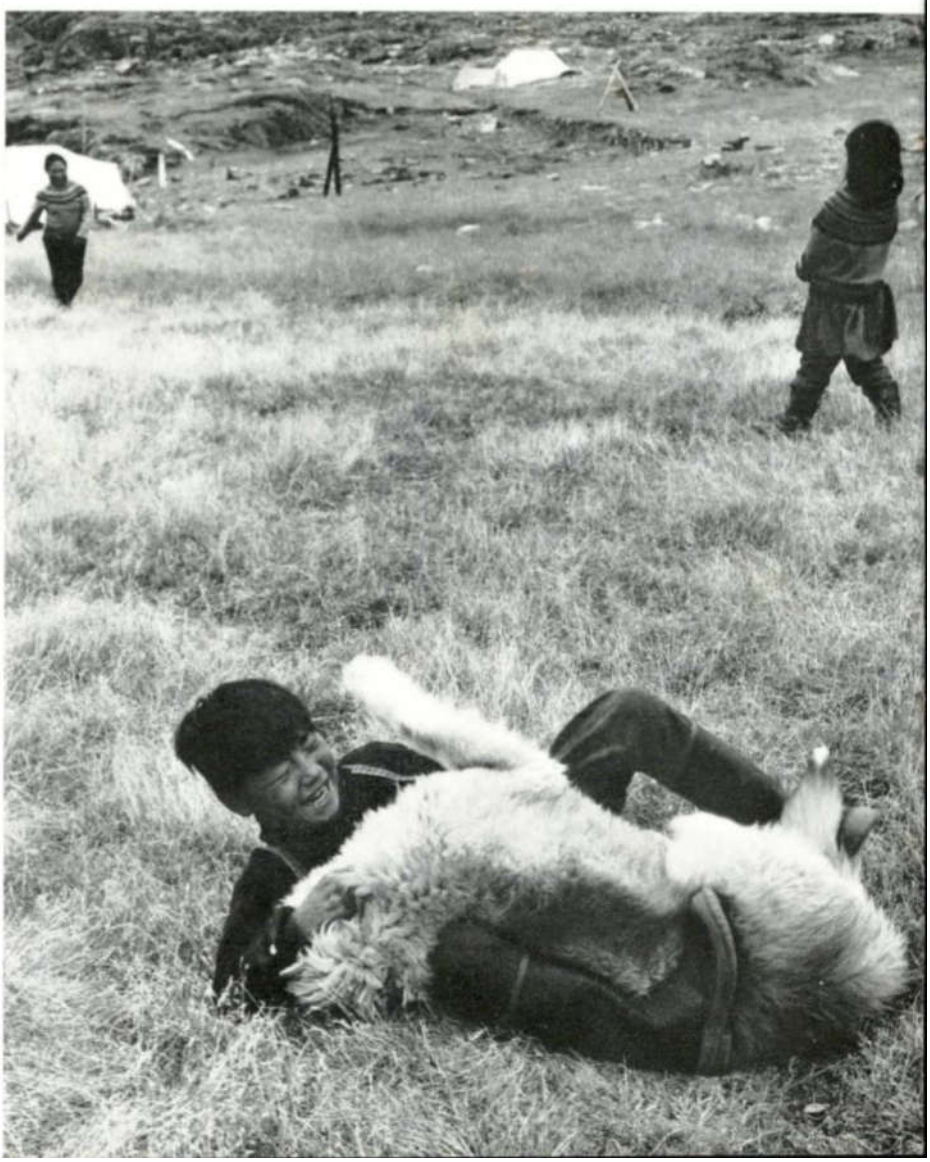


Life at the camp follows an immemorial rhythm. The men hunt seal in the bays and inlets, or caribou inland. The women look after the children, cook, sew, clean and stretch the skins the men bring home, wash clothes, and keep the tent in order. And the children lead a wonderful life, part play and part work. The boys spend hours patiently stalking snow buntings or waders and the girls pamper the baby and carry it round in the back of their miniature amautiks.
With his youngest child, Ashewak, on his knee Etuguloopia sings a little song but the baby is more interested in seeing what mother is doing; she, Mary, is tending the seal-oil lamp. The older girl, Saiudla combs Elisapee's hair. Then there is a game of tag, with plenty of obstacles to make it exciting.



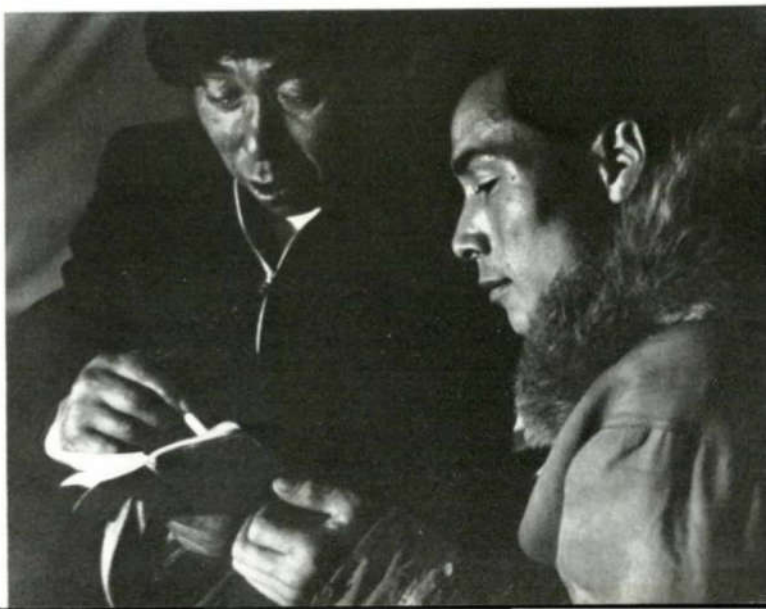
There is always something to keep a woman busy. Using her ulu, the crescent-shaped woman's knife, Mary cleans a sealskin. Kimaloo, a shy Eskimo beauty, lives with Etuguloopia's family and helps Mary with her work. Kimaloo is taking a sealskin off the stretching frame. Etuguloopia and some of the boys return from a caribou hunting trip inland. They bring back the fresh pelts and the dog carries some of the meat. Most of the meat has been cached and will be picked up during the winter.
In the evening, at low tide, everyone goes down to the tidal flats to dig clams. This may be work but for the children, at least, it is also fun.





While the children play near the
camp and romp with a friendly dog,
Etuguloopia waits patiently near
the bay for a seal to surface.
In the afternoon while
the men are hunting Kimaloo
gathers berries on the mountain side.
Then, suddenly, the family decides to
leave, maybe for a trip to
Frobisher to trade their furs for
flour, tea, sugar, and ammunition, or
maybe just to shift to another
camp site a few miles away.

In the move everyone has his duties and, surrounded by paraphernalia from the tent, which the children will carry to the boat, Aipilee clutches an escape-prone pup. Before he goes, Etuguloopia draws a map for his neighbour Inuki to show where he found caribou.

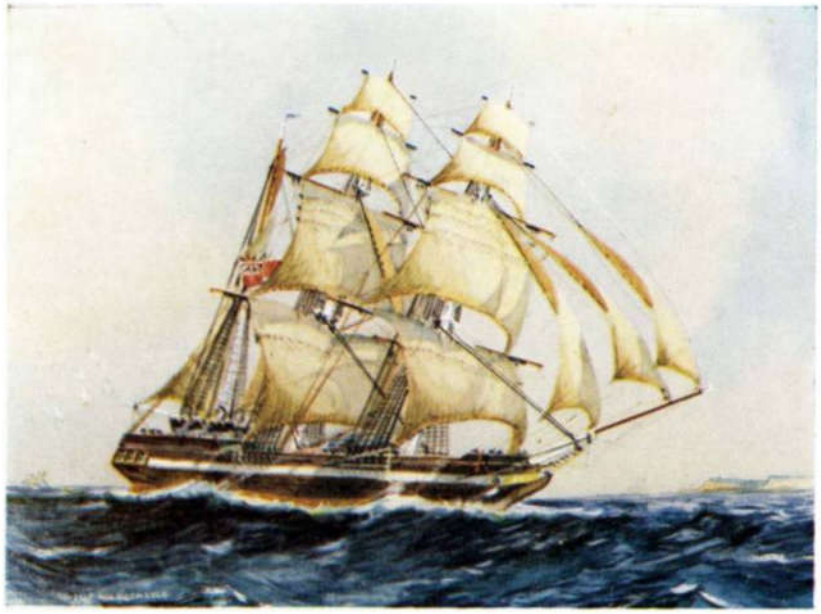


In ninety minutes the 22-foot freighter canoe, loaded with the tent, all their belongings, and the whole family, is purring across the bay to a new camp. On the way they meet another boat with Eskimos who have shot a walrus. An hour after they arrive the tent stands again, held firmly by a ring of heavy stones, and everything is in its accustomed place. The tea kettle hums, the seal-oil lamp burns again, the children bolt some bannock and meat and rush out to explore all the wonders of their new home, and the men get ready to hunt. The immutable rhythm of camp life begins anew.

Apprentice Voyage 1867

BY ALEX STEVENSON

Administrator of the Arctic and one-time fur trade apprentice.



The "Prince Rupert" in which Cowie crossed the Atlantic, from a painting by J. W. Hardcastle.

ON 1 JULY, 1867 two ships of the Hudson's Bay Company, the *Prince Rupert* and her consort, the *Lady Head*, lay at anchor in Stromness Harbour in the Orkneys. All was ready awaiting a fair wind to carry the ships out across the Atlantic on the annual supply voyage to Hudson Bay.

On board the *Prince Rupert* a young Scotsman, Isaac Cowie, waited with the eagerness and impatience of youth for the journey to begin. He was a boy from the Shetland Islands (many of the Hudson's Bay Company's most distinguished servants came from the sprinkled islands of Shetland and Orkney off the north coast of Scotland); he had signed on as an apprentice clerk with the Honourable Company and was now bound for York Factory on the west coast of Hudson Bay.

Next morning with eight bells of the morning watch the wind rose. The *Lady Head* raised the Blue Peter at the same time firing her guns in the signal to sail. Captain Henry Bishop of the 500-ton barque *Prince Rupert* gave orders to weigh anchor and set all sails. Aloft, lashed up at the topmost shrouds were huge quarters of prime beef which beneath a surface hardened by wind and sun kept perfectly fresh throughout the voyage. As the crew sheeted home canvas and hauled up the anchor, they sang shanties—"Haul Away the Bowline" and "Across the Western Ocean". Their strong voices echoed across the harbour.

The canvas billowed; the British Red Ensign flew at the mizzen peak of both ships and the Company's flag at the mainmast head. Slowly the two vessels slid out of the anchorage past the rugged hills of the Island of Hoy. Cannon salutes were exchanged with the battery at Stromness and the *Prince Rupert* dipped her ensign in a farewell to Scotland. Perhaps Apprentice Cowie felt a momentary pang at leaving his homeland and may have been humming "Auld Lang Syne" or "Will Ye No Come Back Again" as the fine east wind swiftly bore the vessels away from the shore to the swelling waters of the north Atlantic.

For the first six or seven days of the outward voyage the ships ran before a fine breeze at around eight knots. According to the practice of the period for Hudson's Bay Company's ships, they would keep close together for mutual assistance until well across the Atlantic. Then, as on this occasion, they would make their separate ways to Moose Factory and York Factory on Hudson Bay. The first few days brought the usual cases of seasickness. Young Isaac, whose father and brother were doctors and who had received two years medical training in Edinburgh, was called on for advice. The remedy he prescribed for one patient was pills of bread and cayenne pepper. The patient was intended to derive physical, but probably obtained more mental, relief from the treatment.

Bound for the new world in the *Prince Rupert* were a number of tradesmen for service with the Northern Department of the Company; two blacksmiths, a boat builder, a cooper, and twenty-four labourers. Most of these were hardy men from the Hebrides. Before sailing

they had been given a complete medical check up and clearance, and certificates of good character from the ministers of their churches.

Other passengers were Miss Mason and her maid. Miss Mason was on her way to York Factory to join her father, the Reverend William Mason, a missionary with the English Church Missionary Society. With Isaac were two other apprentice clerks—Alexander Christie and David Armit. All had signed five-year contracts to "faithfully serve the said Company as their hired servant in the capacity . . . and devote the whole of his time and labour in their Service and for their sole benefit . . . by day or by night . . . and obey all the orders which he shall receive from the Governors of the Company in North America or others their Officers or Agents . . ." Other clauses in the contract covered military duty in defence of Company property; the sacredness of the furs obtained; dismissal and forfeiture of wages. It was an extremely one-sided contract with the wage of £20 (approximately $100) for the first year, rising to £50 in the fifth year, to commence on embarkation for Hudson Bay.

In the ship's hold cargo was made up of a wide variety of goods required for trading operations—gunpowder, bullets and shot, cases of flintlock guns, twine for fishing nets, tea, tobacco, axes, files, traps, knives, needles, frying pans, copper kettles, flints and steels. There were bales of Hudson's Bay Company Point blankets and items of clothing (although these were only considered necessary when the Indians were unable to use furs or skins for wearing apparel) and a few cases of books which individuals were allowed to import. Supplies were carried for the Red River settlers and missionaries throughout the region. The long awaited mail and parcels from home were given a special place of easy accessibility for sending ashore on arrival. Other luxuries from the outside were sugar and a number of puncheons of rum and smaller quantities of brandy and wine. Flour, biscuits and salt meat in limited quantities were included for use in the posts, but the officers and servants of the Company were expected to obtain most of their food from the country.

With a spell of fine weather, members of the crew contributed to entertaining those on board. There was an Orkney man who was a wizard on the fiddle and could play almost anything asked for. A Frenchman named Jean, a deserter from the French Navy, was a most agile dancer and acrobat. A group of Highlanders were in good voice and rendered many a sentimental ballad that reached the hearts of those who knew Gaelic. The boatswain, Aitchison, a real old salt of the Seven Seas, carved and painted a wooden figure which he manipulated on a thin spring board to the tune of the fiddle. The figure performed dance steps and other contortions to the amusement of passengers and crew.

Many long hours were passed with the first mate, MacPherson, a raconteur of note who had many a tall tale to tell. He was in particularly good form when the young apprentice clerks were within earshot. They heard all about the horrors that they would encounter in the wilds of Canada—from cannibal Indians to ferocious wolves. His favourite expression as he regaled his impressionable young listeners was "You are young bears with all your troubles before you". Reading books and playing cards were other pastimes. As for exercise, there were turns around the deck. The young apprentices also assisted the crew and learnt to climb the riggings for the setting and furling of the main topgallant and royal sails.

On 12 July the ships encountered light baffling head winds. Towards evening a barque was sighted heading towards them—homeward bound. At first it was thought to be the *Ocean Nymph* which had wintered on Hudson Bay on a whaling and trading voyage. If she came alongside there would be a chance of sending back mail and there was a rush to write a few letters. Shortly, Captain Bishop reported that the ship was not the *Ocean Nymph* but a Danish vessel probably from Greenland. The vessels swiftly passed each other without any communication or change in course.

The next day was bright and calm. That evening a light breeze from the east sprang up. This increased and by 14 July the *Prince Rupert* rounded Cape Farewell, Greenland under full sail and at a speed of eight knots. Icebergs were numerous in this area and the look-out was alert. With the veering of the wind they stood into the coast of Greenland until evening. The ship was then put about; the wind fell and sails no longer steadied her in the strong cross swells caused by the three different currents running along the east and west coasts of Greenland and from the Atlantic. The *Prince Rupert* dipped

York Factory, where the voyage ended, as it was about 1900.

Isaac Cowie in 1884 when he was in Scotland to be married.
COURTESY RUBY JOHNSTONE

her yardarms, wallowed and wove and pitched and ploughed.

With the morning of 16 July the ship was now over two weeks out of Stromness Harbour. She ploughed along slowly at around two knots through a heavy drizzle and mist. Here, large numbers of sea petrels, which the sailors call "Mother Carey's Chickens" were sighted. In sea lore, the sight of these birds was the sign of a coming storm. At this time the monotony of the voyage was further broken by two large whales, presumably of the Right or Greenland species. These massive mammals surfaced about 100 yards from the vessel. Although there was a slight blow around four o'clock the weather cleared and the southern coast of Greenland was sighted towards the north beyond a number of spectacular icebergs. The passengers were, as everyone is on his first voyage north, fascinated by the beauty of the various shapes and sizes of the icebergs.

During the next seven days, favoured by light winds the *Prince Rupert* crossed Davis Strait. With the increasing threat of ice a large barrel with a trap door in the bottom was hoisted to the mainmast head. This type of crow's nest was learnt from the whalers, as well as a temporary bridge that was rigged up near the mainmast which projected a few feet outside the bulwarks of the ship. This gave the officer of the watch a vantage point to guide the vessel through the ice. Fenders and long spiked poles were made ready to protect the ship's sides and push away the floes. An ice anchor would be used if needed to moor the ship to the ice.

On the afternoon of 27 July there was a heavy swell running and a strong breeze. The *Prince Rupert* must have presented a beautiful sight as Cape Resolution was reported on the starboard quarter. For the next two days immense icebergs were seen as they entered Hudson Strait. These pinnacle perils were "of beautiful variegated sheen to which neither artist's brush nor poet's pen could do justice". In shape some resembled "a church spire" and others "a king's crown". They were now surrounded by loose brash ice, with the riggings ice-coated from freezing drizzle. Slowly the *Prince Rupert* pushed forward and as they came abreast the Savage Islands a number of seals and walrus were spotted. Since it was Sunday no shots were fired, although some of the crew had rifles on deck.

After the open ocean, Cowie and his young colleagues found manoeuvring through the ice lanes quite exciting. When the mate, MacPherson, was on watch he seemed to enjoy ramming the big floes so that the ship would be brought up with a crash and shake from stem to stern. On one occasion while the passengers were at dinner, the mate kept on full sail through frequent squalls. Suddenly the ship crashed into a heavy floe and came to a dead stop. Apprentice Christie literally flew across the dinner table with his plate of pea soup into Miss Mason's lap. This called for some appeasement; the skipper rushed on deck, shortened sail, backed the ship out of the ice and gave the mate a salty dressing down.

Big Island loomed ahead. It was here that many of the whalers operating in Hudson Bay would stop each summer and pick up a number of Eskimos to assist them in manning the whale boats. Ships of the Bay also called here but when the *Prince Rupert* hove to, expecting a number of Eskimos to come out in their kayaks and skin boats, much to the disappointment of Isaac Cowie and others, none appeared. Having heard so many tales from the romantic-minded mate and other old voyagers of these strange nomads they were indeed sorry to have missed them. From North Bluff on Big Island they crossed to the southern side of the Strait then west towards Charles Island. On the morning of August 3rd as they pushed along through loose ice at about four knots, a barque was sighted off the port bow. The *Prince Rupert* fired two cannon to attract her attention. To increase the sound empty beer bottles were put next to the wads. They flew out of the cannon with a terrifying screech.

The barque, a Yankee whaler *St Andrews* out of New Bedford, hove to and sent over a whale boat manned by a smart crew. They were returning from a short and unsuccessful whaling cruise in Hudson Bay and were now bound out of the Strait for Cumberland Sound on the east coast of Baffin Island to continue the search. After a short visit on board, Captain Bishop presented the visitors with some beef, beer and spirits for the master of the whaler.

On Sunday, 4 August a strong off-shore breeze and sporadic heavy squalls kept the *Prince Rupert* running close to land. There, instead of snow as on the north shore, the high bluffs were covered with the warmer shades of the tundra. Apprentice Cowie compared them

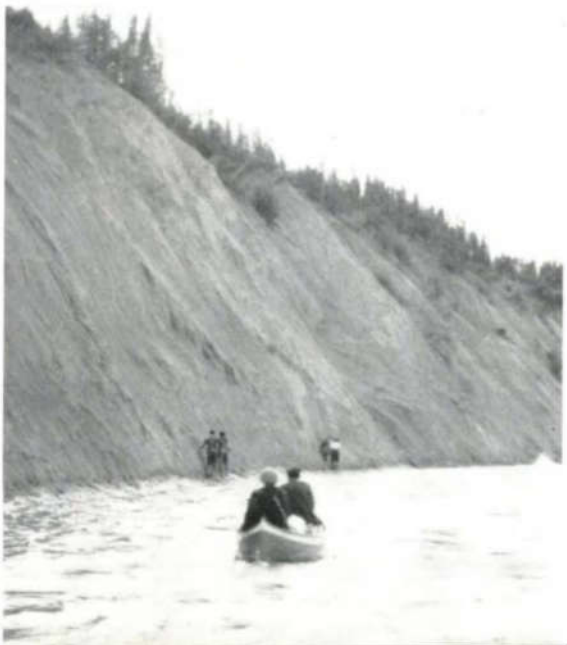
Some of the buildings behind the big depot at York Factory in 1880. GEOLOGICAL SURVEY

to the heath clad hills of home and recalled his last glimpse of land as they sailed from Scotland—the hills of Hoy. That afternoon they rounded Cape Wolstenholme where Henry Hudson had called for fresh water in 1610 (at the same place 299 years later, in Eric Cove, the Hudson's Bay Company established their first Arctic post, specifically set up to trade with the Eskimos in white foxes). The ship passed Digges Island and approached Mansel Island the scene of many shipwrecks over the years through adverse weather and inexperienced navigators. In 1864 the *Prince Arthur* was wrecked and the *Prince of Wales* stranded on this island. The *Ocean Nymph* in the same flotilla fortunately escaped disaster because of her light draft and her crew were able to carry out salvage and rescue operations.

This dangerous area was well known to the veteran Captain Bishop who before he retired spent forty years voyaging to Hudson Bay for the Hudson's Bay Company. As a heavy short sea arose from the south his loud voice sounded like a trumpet above the roar of the wind, the rattling of the riggings and the clattering of the canvas: "Close reef topsails, close reef foretopmast staysail". The crew responded smartly as the vessel rolled and pitched. Below decks the passengers who were prone to seasickness were thrown from side to side in their bunks in a seemingly endless pounding.

Five weeks out of Stromness, on August 6th, the wind fell as they rounded the north end of Mansel Island into the Bay proper. Course was then set for the approximately 500 mile crossing to Churchill. Winds increased, becoming favourable and steady. These drove the *Prince Rupert* at nine knots; the weather was pleasant and Isaac Cowie writes that "the nights, too, were exquisitely lovely, the full moon blending her radiance with the silvery crests of the wavelets playing around, and blending her sheen with the phosphorescent, whirling wake left by the ship as an evanescent trace of her path across the deep".

Tracking a canoe up the Hayes River at the beginning of the century.



Some fifty miles east of Churchill, on the 11th, the ship's cannon were fired to announce the safe arrival of the *Prince Rupert* and notify the schooner that her services as a tender would be required at York Factory. The *Prince Rupert* did not go into Churchill but moved down the west coast of Hudson Bay, taking soundings regularly as they approached York Roads. Fog obscured the low shore line; a slight wind carried a faint aroma of spruce and brought out to the ship some of the numerous blood-seeking inhabitants of Rupert's Land—mosquitoes.

On the afternoon of 12 August the anchor which was last weighed at Stromness on 2 July was cast in York Roads in the turbid, sand-barred estuary off the twin rivers—the Hayes and the Nelson. (The latter was named by Button for Francis Nelson the sailing master who died there when the ship wintered on a voyage in search of the Northwest Passage in 1612-13). York Factory was some twenty miles up the Hayes. Cowie and his fellow apprentices for the last time went aloft to assist in the stowing of the mainsail. At intervals the ship fired her cannon to let those ashore know that the annual supply ship had arrived. Next day the schooner *Marten* came out from the Factory with a pilot to take the *Prince Rupert* from her anchorage in York Roads to another in the channel of the Hayes River some seven miles from York Factory. The mail and some of the cargo were transferred to the *Marten*. After mooring, a salute was fired and the thunder of the answering guns roared a welcome.

After six weeks aboard the cramped quarters of the *Prince Rupert*, Cowie, Christie and Armit were happy to be taken ashore on 14 August. Bidding farewell to the friends they had made in the crew, they sailed up the Hayes to the Factory arriving there late in the evening. Cowie had now reached Canada and his first impression was the smell of the spruce which seemed all-pervading

Indians at a mission in the Qu'Appelle Valley, 1885, across the lake from the fort.

and as characteristic of the country as the peat-reek is in many parts of Scotland. The *Prince Rupert* swung at anchor as the schooner went back and forth for the annual supplies and trade goods. In turn, they took out to the ship the year's catch of fur which was safely stored below for the homeward voyage to the British Isles.

The transient quarters assigned in the "Summer House" for visitors of Cowie's rank were bare but he was greatly taken by the blaze of barbaric decorations in the rooms of "Bachelors' Hall", the residence of the permanent apprentice clerks. The walls were hung with "Indian silk and bead and wool work of every hue, which adorned the attire of these 'veterans' from head to foot, also their gun-coats, shot pouches, firebags and snowshoes, all of which were hung up round the room, alongside of coloured prints of prize-fighters, race horses, hunting scenes, ships and yachts, and photographs of all kinds". No doubt the pin-ups of the period.

He was impressed, too, by the importance of York Factory which was established in 1682. During the wars with France its possession changed hands six times and was finally restored to the British by the Treaty of Utrecht in 1713. Its location was on the chief highway from Hudson Bay into the unknown west. Many famous men not only in the history of the Hudson's Bay Company but important figures of exploration passed through this now abandoned fur trading post. Some of these were Kelsey, Thompson, Franklin, and Rae. Then Ballantyne, the author of many books for boys and whose writings inspired Cowie and others to join the Company and the fur trade, was also an apprentice at York Factory.

In this Centennial year, recalling so much of Canada's rich history, many memories must arise from the ghostly York Factory which has seen such stirring sights in its time. From here Governor George Simpson and his colourful French-Canadian voyageurs started on his two record-breaking transcontinental trips of 1824 and 1828. Then there were the meetings and related stories of the occasions when the Council of the Northern Department of Rupert's Land met at York Factory under the determined chairmanship of the "Little Emperor". In this atmosphere of history, and as any young adventurer, Cowie could not help but be thrilled by all he saw and heard as he set foot in Canada. He was, however, only to stay at York Factory for a few weeks and on 4 September we find him setting out with a brigade of four boats manned chiefly by Swampy Cree Indians for his ultimate destination at Fort Qu'Appelle, via Norway House and Fort Garry. The first leg to Norway House would be 400 miles. When there was no wind it was necessary to track up the Hayes. During the "tracking" one half of the crews remained in the boats while the others scrambled along the shore pulling the boats, changing over every 30 minutes. They made reasonably good time as they leaned into their portage straps, straining and pulling on the tow line. This heavy toil which continued from dawn to dusk, wet or dry, in heat or cold, was accomplished on a dreary if nourishing diet. The mainstay was pemmican, dried pulverized buffalo meat mixed with tallow, eaten plain or made into a kind of stew called rubabou; the supplement bannock, consisting of flour, water and a little pemmican grease, without any rising and usually half-cooked by being exposed on twigs or frying pans before the camp fires. Boatmen in the interior had to make do without even the flour. The restorative was immense draughts of strong black tea.

Cowie notes the changing scenery as they came up the river and how on the 17th of September after a portage past Trout Falls they met a down stream brigade. The boats were under a veteran Red River guide, Baptiste Bruce and manned by Métis, all gaily decorated in fancy shirts and feathers just as they had embarked that morning at Oxford House post after a ball attended by all the beauty and fashion of that vicinity. As the crew swung their oars in dashing style they seemed as able to row all day as to dance all night.

Passing Oxford House, Cowie saw the wrecks of several of the quaint Red River carts, relics of an attempt to use

the first Hudson Bay road. They dragged the boats over the height of land which divides the headwaters of the Hayes and Nelson and sailing up the Nelson with a good breeze on 24 September they came to Little Playgreen Lake on the shores of which stood historic Norway House. From this island centre the whole boat transportation system of the Northern Department was controlled. It also became the regular annual meeting place of the officers coming from and returning to such immense distances as Fort Vancouver at the mouth of the Columbia River, New Caledonia (British Columbia), and the Mackenzie River. "While the grandees were holding solemn conclave in the council hall, and sealing the fates and fortunes of the fur trade and its engagés for the year, the voyageurs in the encampments outside the stockades held high festival." Norway House was also where the Reverend James Evans, the Wesleyan missionary, invented in 1840 the Cree syllabics. For a people who had no written language this opened doors of communication and learning. This system was later adapted to the Eastern Arctic Eskimos.

A plains Indian such as Cowie might have seen.

MANITOBA ARCHIVES

Running under sail on Lake Winnipeg they landed on the marshes at the mouth of the Red River on October 1st. From here it was a short distance to Lower Fort Garry and then on by buggy to the Upper Fort where the great city of Winnipeg now stands. Cowie spent a few pleasant and profitable days at Fort Garry—known also throughout the plains as "The Forks" because of the meeting here of the Red and Assiniboine Rivers. By buggy, horseback and on foot he moved to Portage La Prairie which he reached on 10 October and he reminds us "The place derived its name as the portage over which the early French traders, coming up the Assiniboine, carried their cargoes to Lake Manitoba, a distance of nine miles, and forwarded them up the lake to Fort Dauphin and their other posts beyond".

Finally, after a six day hold at Fort Ellice at the junction of the Qu'Appelle and Assiniboine Rivers Cowie set out on the last lap of his journey to Fort Qu'Appelle. He journeyed on horseback following a wide and beautiful valley and a good well-beaten trail, then on 26 October he galloped into Fort Qu'Appelle. Here he was greeted by Mr Archibald McDonald who was a veteran trader, having come to the country in 1854.

This then was Isaac Cowie's apprentice voyage of 1867, reaching Canadian soil 44 days out of Stromness and another 68 days to Fort Qu'Appelle. He spent many years in the service of the Hudson's Bay Company but no doubt his most vivid memories were those first impressions of the outward voyage and the varied new experiences and sights of North America. An exciting era of our history! As he himself relates: "At the time of my coming to the country, in 1867, it was as much in the state of nature, outside the Red River Settlement and the pickets of the posts and mission stations, as it was when originally discovered and explored. Only nature's highways through the webs of interlocking waterways were in use, except where the Red River cart roved complainingly o'er the plains. But great changes to come were already casting their shadows before, and eighteen years after my arrival the prairies had been swept of their buffalo, and the great transcontinental railway had invaded the domain of the cart and cayuse, leaving only picturesque memories of a wild and romantic past. The prairie Indians, when I first saw them, were monarchs of all they surveyed, living like princes on the fat of abundant game, hunting their sport, and war their glorious pastime; for they were 'free as the day when nature first made man'."

Such was a large part of this vast country, as Canada entered into Confederation one hundred years ago. ◆

NORTHERN BOOKS

CONQUEST OF THE LAST FRONTIER

By L. H. Neatby. Ohio University Press, Athens, Ohio; Longmans Canada, Don Mills, 1966. xvi, 426 pages, bibliog., maps. $10.00.

Reviewed by W. L. Morton

This lucid narrative and well made book is an account of the attempts to reach the North Pole, complete the exploration of the Arctic basin, and traverse the North West Passage. The expeditions traced date from that of Elisha Kane in 1853-55 to those of Stefansson completed in 1917. Working from the published narratives of the explorers, assisted by biographies and other Polar literature, Dr Neatby has made an immensely readable book of a distinct phase of Arctic exploration. The phase was that of the transition from exploration by ship to that by sledge, exploration aided by the increasing use of scientific method and technology on the eve of the supersession of all surface travel by the airplane and the submarine. It is central to the book's theme that an east to west passage from the Atlantic to the Pacific, almost made in reverse order by McClure, was at last made possible by the use of the internal combustion engine. Even more fundamental is how the book illustrates that the conquest of the Arctic has depended either upon adaptation to Arctic conditions, Eskimo-fashion, by living on the country and moving by sledge, or upon a far higher technology than that available before 1917.

Mr Neatby not only gives unity, and by unity ready comprehension to his theme, he also restores to memory many names at least half forgotten while those of earlier explorers, who may not have done much more for exploration, remain in legend or in lower latitudes than those of the High Arctic. The quest for the Passage, culminating in the tremendous drama of the search for Franklin, is embedded in literature and even folk memory. Not so the names of those who undertook the tracing of the mazes of Polar ice and land, and made the attempt, partly scientific, but really as competitive and pointless as the present space race, to follow "The American Route" between Greenland and Ellesmere Land to the Pole. Even the once resounding name of Robert E. Peary seems archaic to one who remembers his name in the papers.

This success is owing not only to the author's skill in narration, but perhaps even more to the imaginative care and insight with which he has revived the characters of the men of whom he writes. Kane, Greely, Peary, are outstanding examples of biographical recreation, and even minor figures are given remarkable substance; few are mere names. The fewness of the dramatis personae, the intensity of the Arctic experience explains much of this, but Mr Neatby has made the most of the opportunities offered.

One defect does stand out. The Peary-Cook controversy is admirably handled, and also the tragic ending of the Greely expedition. The bitterness surrounding Stefansson's Canadian expedition is not touched on. No doubt this was because the book was written before Stefansson's death. But the lack should be repaired in a second edition.

There is a general map, and useful regional maps, of the Canadian Arctic. The two illustrations are good, but too few.

Professor Morton, whose work in the field of Canadian history is well known, is Master of Champlain College and professor of history at Trent University in Peterborough.

CANADA'S FIRST BANK VOL. I

By Merrill Denison. Toronto: McClelland and Stewart, 1966, x, 471 pages. $7.50.

Reviewed by R. C. Bellan

Mr Denison's book is simply first class. He has produced valuable data that illumine a number of dark corners in Canadian economic history, from recondite sources such as documents in the archives of an English investment house, private letters and records, and the Resolve Books in which, for 150 years, directors of the Bank of Montreal tersely recorded their collective decisions. By making extensive use of already published material as well, he has produced a highly readable account of the bank's affairs as part of the broad stream of Canadian economic development. Significant episodes in the bank's history are described in ample context, so that they appear as management's adjustments to the opportunities and the constraints thrown up by circumstance and by external pressures.

Thus the bank was established in 1817, after 25 years of trying by John Richardson; only then was the time ripe. The Army Bills which were introduced during the War of 1812 and circulated until withdrawn in 1815 had proven to be a thoroughly satisfactory and extremely useful medium of exchange; the accelerating pace of economic activity after the War's end imperatively demanded an expansion of the money supply. The bank's nearly unbroken record of growth reflected the rapid if irregular expansion of the Canadian economy and the capacity of management to appreciate and exploit opportunities that were abundantly available. There were occasional difficulties of course. Mr Denison provides a thoughtful account of the deposition of President Samuel Gerrard in 1825, skilfully weaving together a diverse array of narrative threads. The reorganization of the Canadian fur trade after 1821 (made necessary in part by the preferential treatment accorded by the British government to an élite British organization over a collection of colonials), and the financial crisis suffered by the U.K. at this time, together generated a host of difficulties which ultimately produced the fateful clash in a Montreal board room when a determined affiliate of the triumphant Hudson's Bay Company successfully demanded the dismissal of a president who had been a member of the clan of the North West Company and who had now transgressed the rules in order to extend sympathetic treatment to an old Montreal firm that had been hard hit by the removal of the fur trade from the city and was being pursued by English creditors who were themselves under pressure because of their country's monetary difficulties.

The book contains detailed evidence of the close financial relationships between Montreal and the American cities of Boston and New York: personal visits by bankers were frequent; large amounts of specie were shipped back and forth; capitalists in these two American cities participated extensively in ventures in the Canadian city. On another issue an interesting speculation is set forth. Sydenham advocated the establishment of a provincial government bank which would have the exclusive right to issue paper currency in Canada, to an amount substantially exceeding its holdings of gold. This had been proposed in England by members of the "currency school" in the great

controversy over the country's monetary arrangements in the early nineteenth century. Sydenham had been a leading advocate of the principle during the great debate; Mr Denison suggests that he attempted to establish the principle in Canada so that her example might influence opinion in the mother country.

The writing style is clear and pleasant as befits a volume issued, partly at least, for public relations purposes; there are, however, some sharp and perceptive opinions such as the suggestion that the venturesomeness of American bankers, while it admittedly led to considerable losses, might have promoted a fuller utilization of the nation's productive energies than would have been achieved by more conservative financial arrangements.

The book has not been written in the usual "scholarly" fashion: its pages are not bewhiskered with footnotes and it contains a number of delightful pictorial representations of nineteenth century life and people. This reviewer regards it, however, as a most useful and welcome addition to the literature on Canada's economic history.

Mr Bellan is associate professor in the Department of Economics at the University of Manitoba and the author of "Principles of Economics and the Canadian Economy."

I, NULIGAK

Translated and edited by Maurice Metayer. Peter Martin Assoc., Toronto, 1966. 208 pages, illus. by Ekootak. $5.00

Reviewed by L. A. Learmonth

This is a book every Canadian ought to read, and Father Metayer's introduction is, I'd imagine, the best possible review of it. It is an autobiography of Nuligak a remarkable Mackenzie Delta Eskimo hunter, covering his lifetime, that is from 1895 to 1966, which we older Kablunaks (myself 1892-19--?) were, often unhappily, aware was a sadly upsetting period of economic and social upheaval and swift change throughout most of the rest of Canada as well as round about the Delta. Most older readers will be particularly interested to note by his narrative that Nuligak would seem to have made the adjustments from his earlier stone age sort of life, with its tales of hair raising, brutal, cruel and murderous chain reaction blood feuds etc., such as make even Hitchcock's horror stories seem pale by comparison, to the changed circumstances (including R.C.M.P.) prevailing in his homeland today, more easily than I myself have been able to do with the hectic, ever more costly and often empty though fascinating way of life developed and developing (like Topsy mostly) round about Toronto.

About that point of view I would say to readers-to-be that they may accept pretty well every line in the story as being true, then make what they can of it from there on. They will note the thread of conceit and vanity of a typical top notch Eskimo hunter running through most of the narrative, and which would relegate the woman's place in Nuligak's understanding of the proper Eskimo social scheme of things as being almost incidental to that of the hunter when, in fact, it is decidedly the greater, if not more important part of it as some of us older Kablunaks who knew the Eskimos were inclined to believe. You see, up to fairly recent times a girl, a good dog, a kayak, or a rifle had about equal values in many parts of Eskimo Canada, including the Western Arctic.

Any "outsiders" reading the book should note how important the white whale was to the Delta economy. They might ask themselves, as I do, what can have happened up there that none of the Delta hunters these days would seem to think it worth their while to go after the white whales, such as those in the news recently, that were trapped by freeze-up (a common enough occurrence in several parts of the Arctic) when, so short a time ago, that would have been considered a godsend and windfall, as in Nuligak's story.

There are good maps inside the front and back covers of the book that will enable readers, not acquainted with the Delta area, to follow Nuligak easily in his wanderings. Also Ekootak's excellently descriptive drawings will be found helpful.

Although Father Metayer has done a most excellent and commendable job with the story in general he makes a few minor errors when mentioning certain explorer Kablunaks famous in our larger arctic story, such as: "Nuligak was born in 1895 . . . at that time Nansen was preparing to launch the *Fram* to conquer the ice of the North Pole . . . Nuligak was a boy of eight when Parry started his Arctic odyssey." The *Fram* had completed its drift across the polar sea by 1896. Nuligak would have been fourteen not eight years old when Peary (not Parry) reached the North Pole in 1909.

Again: "Later he [Nuligak] speaks of Stefansson and Richardson . . ." Surely not the Richardson of 1840s fame? Nuligak must have meant Anderson, Jenness, or Storkersen or someone of their time.

But these are unimportant and irrelevant errors the publishers' editors might have noted and corrected.

Mr Learmonth, retired H B C fur trader, began in 1911 a lifetime career in the Canadian Arctic.

THE PLAINS-OJIBWA OR BUNGI: Hunters and Warriors of the Northern Prairies with Special Reference to the Turtle Mountain Band

By James H. Howard. Anthropological Papers Number 1, South Dakota Museum, University of South Dakota, Vermillion, South Dakota, 1965. 165 pages, illus. Paperbound $5.00.

Reviewed by Edward S. Rogers

James Howard in his *The Plains-Ojibwa or Bungi* has given us our first extensive ethnographic account of these people and of the *metis* who are in association with them. This work is certainly most welcome. It covers all aspects of Bungi life as lived in the past as described by informants, supplemented by what published material is extant. Note is taken also of those customs the people still retain although this is not a study of the contemporary scene. The economy, social organization and ceremonialism are all dealt with. Howard points out (pp. 3-4) how the Bungi changed from a Boreal Forest way of life such as their kinsmen to the east enjoyed, to that typical of the Plains Indian. The picture given in this work certainly shows the strength of Plains culture in its converting the Bungi from Woodlands to Plains Indians. This is most intriguing. It is to be hoped that Howard, with his broad knowledge of the Ojibwa, will soon investigate and isolate those factors which might account for the rapid shift from one way of life to another in so many aspects of their culture. The decline of the *Midewiwin*, so important to the Boreal Forest Ojibwa, and rise of the Sun Dance is a case in point. This, however, is not a criticism. Howard has added immeasurably to our knowledge of the Ojibwa and it is to be hoped that more such works are forthcoming.

Dr Rogers is curator of the Department of Ethnology at the Royal Ontario Museum, University of Toronto.

LAND UNDER THE POLE STAR; A Voyage to the Norse Settlements of Greenland and the Saga of the People that Vanished

By Helge Ingstad. Translated from the Norwegian by Naomi Walford. St. Martin's Press, New York; Macmillan of Canada, Toronto, 1966, 381 pages, illus. $10.95.

Reviewed by Haraldur Bessason

The present work deals with the settlement in Greenland, founded by Eirikr the Red about A.D. 985. This subject has given rise to scholarly debate which has centered mainly upon the unknown fate of the Greenland settlers. For centuries they were in sporadic communication with other parts of the world, but about 1500 the last echoes from this remote outpost seem to have died out. Did these people finally succumb to bitter living conditions and pestilence? or were they slain or absorbed by their neighbours, the Eskimos? Mr Ingstad believes that some of the last Greenlanders emigrated to Norway in the 15th century and that a few of them went to England a little later.

On the whole, Mr Ingstad's presentation is filled with arctic vigour, and his book can certainly be counted among the most fascinating accounts published about Greenland. The author has the ability to place himself in the position of the people he is writing about, and in doing so he has considerably shortened the distance between the readers and a little-known, but nevertheless interesting subject. Many illustrations of high quality enhance the appearance of this attractive volume.

A few criticisms are in order: The author appears to have overlooked the fact that two ancient sources (*The Book of the Icelandic Settlements* and *The Book of the Icelanders*) suggest that Eirikr the Red was born in Iceland about A.D. 930. One of these works contains two different accounts of Eirikr's father and his arrival in Iceland. A discussion or comparison of these two accounts and an attempt to evaluate their relative historical trustworthiness is highly relevant to this problem. Even though this question cannot be settled here, it is evident that Mr Ingstad's chronology of 10th century events, with Eirikr the Red's date of birth fixed at about 950 in Norway, must be rejected, if for no other reason than that the birth of Leifr Eiriksson himself (Leif the Lucky) could then have fallen on a later date than his explorations into the Western Hemisphere.

Mr Ingstad deserves special recognition for emphasizing the factual element in *Graenlendingasaga* (The Saga of the Greenlanders). According to this source Bjarni Herjolfsson became the first man to discover the Western Hemisphere. That discovery again lead to the subsequent explorations of Leifr Eiriksson from Greenland to this continent. The acceptance of this source makes it necessary to reject or at least modify parts of the accounts of the other major source on Greenland and Vinland, viz. *Eiriks Saga rauda* (The Saga of Eirikr the Red). This has not been carried out in the work under review.

The author could have been more specific in his account by using the words "Icelander" and "Greenlander" in lieu of the vague "Norseman." Iceland became a republic more than half a century before people from there founded the Greenland settlement. When leaving Iceland, these people were "Icelanders." However, they became "Greenlanders" (not to be confused with the "Skraelings"—the indigenous people) after they had settled in Greenland. This is borne out by a reliable account from about 1122 (Ari the Learned's *Book of the Icelanders*). From that time comes also the account *maintaining that the Greenlanders had met Skraelings in Vinland*. Mr Ingstad has therefore gone too far in the preface to his book (p. IX) in his claim to the authorship of the theories that "the Norsemen discovered the New World" (he uses the expression "my theories" etc.). If the term Norsemen" comprises both "Icelanders" and "Greenlanders"—and this it must do if it is to accommodate both Bjarni Herjolfsson and Leifr Eiriksson—then these theories are more than 840 years old; or, in other words there never have been any theories in this regard, because the factual element of the sources in question has never been seriously doubted.

Finally, there is a minor complaint regarding the translation of Mr Ingstad's book which readers with some knowledge of Scandinavian languages will doubtless share with the reviewer. This concerns the source material which is presented here in an English translation of a Norwegian translation from Icelandic. This is, for instance, obvious in the treatment of names of books and people. Thus, there are references to *Flatoyboka* instead of the well-known *Flateyjarbok*, and *Tore* instead of *Thorir* (p. 35) to mention only two examples of many. The intermediary language tends inevitably to divert the readers' attention from the main subject, and it also creates a wrong impression of the provenance of the sources.

Mr Ingstad enjoys world renown for his recent archaeological research in Newfoundland. Because of his high reputation, his books on the ancient European-American relations must be read more carefully, and at the same time with a more critical eye, than similar works by other writers.

Professor Bessason holds the Chair of Icelandic Studies at the University of Manitoba.

BEHIND THE PALISADES

By George Simpson McTavish. Gray's Publishing Ltd., Sidney, B.C. 249 pages. $4.75

These are the reminiscences of a man who, following in his father's footsteps, joined the Hudson's Bay Company when he was fifteen in 1878 and served in the north for eleven years. They were preserved by his widow and published posthumously by his sister-in-law.

When he is writing of his personal experiences George McTavish is extremely interesting, and his personal experiences covered sojourns at York Factory and Churchill. He gives detailed descriptions of travel, food, whale hunts, and the life of a young clerk and trader, with sidelights on many personalities who came his way. Interspersed with his own observations is a commentary on the history of Rupert's Land, which is not always accurate, and a certain amount of moralizing in the fashion of the Victorian age. Editing could have improved this autobiography by eliminating the extraneous matter that is better dealt with elsewhere, and an index would have enhanced its value. Mr McTavish's reporting of details of the life of a fur trader in the 19th century is full of interest; his theorizing not so good.

CENTENNIAL CONFERENCE ON WESTERN HISTORY

Planned for laymen and historians this conference to be held at Banff, 17 to 20 May, will feature outstanding speakers from across Canada. Papers will cover such subjects as western development, steamboating, cultural conflict, teaching history, the west in fiction, and many others. Sponsoring the meeting are the Alberta Historical Society, Teachers' Association, and the University. Registration is $20.

For information write: Public Affairs Section, Dept. of Extension, University of Alberta, Edmonton.

Les Feux-Follets

This new national folk dance company was sponsored on its first tour of Western Canada, early in 1967, as one of the major Centennial undertakings of the Hudson's Bay Company. Apart from more than 20 public performances, the company made appearances in The Bay in six larger centres. The program presented by Les Feux-Follets—"The Canadian Mosaic"—was felt to be eminently suited to a Centennial promotion theme. It consists of ten suites, a sea-to-sea dramatization, through song, dance, setting and costume of the legends and customs of the first Canadians—Indians and Eskimos, the French and English, Scottish and Acadian settlers, and the European immigrants.

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